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Furthermore, the contents and sequence listings of Application Nos. 09/091,873 filed June 25, 1998; 60/229,358 filed on April 12, 2000; 60/199,384 filed on April 25,2000 and 60/256,931 filed on December 21, 2000 are hereby incorporation by reference in their entirety.

What is claimed:

1.   An albumin fusion protein comprising a Therapeutic protein:X and albumin comprising the amino acid sequence of SEQ ID NO:18.

2.   An albumin fusion protein comprising a Therapeutic protein:X and a fragment or a variant of the amino acid sequence of SEQ ID NO:18, wherein said fragment or variant has albumin activity.

3.   The albumin fusion protein of claim 2, wherein said albumin activity is the ability to prolong the shelf life of the Therapeutic protein:X compared to the shelf-life of the Therapeutic protein:X in an unfused state.

4.   The albumin fusion protein of claim 2, wherein the fragment or variant comprises the amino acid sequence of amino acids 1-387 of SEQ ID NO:18.

5.   An albumin fusion protein comprising a fragment or variant of a Therapeutic protein:X, and albumin comprising the amino acid sequence of SEQ ID NO:18, wherein said fragment or variant has a biological activity of the Therapeutic protein:X.

6.   The albumin fusion protein of any one of claims 1-5, wherein the Therapeutic protein:X, or fragment or variant thereof, is fused to the N-terminus of albumin, or the N-terminus of the fragment or variant of albumin.

7.   The albumin fusion protein of any one of claims 1-5, wherein the Therapeutic protein:X, or fragment or variant thereof, is fused to the C-terminus of albumin, or the C-terminus of the fragment or variant of albumin.

8.   The albumin fusion protein of any one of claims 1-5, wherein the Therapeutic protein:X, or fragment or variant thereof, is fused to the N- terminus and C-terminus of albumin, or the N-terminus and the C-terminus of the fragment or variant of albumin.

9. The albumin fusion protein of any one of claims 1-5, which comprises a first Therapeutic protein:X, or fragment or variant thereof, and a second Therapeutic protein:X, or fragment or variant thereof, wherein said first Therapeutic protein:X, or fragment or variant thereof, is different from said second Therapeutic protein:X, or fragment or variant thereof.

10. The albumin fusion protein of any one of claims 1-8, wherein the Therapeutic protein:X, or fragment or variant thereof, is separated from the albumin or the fragment or variant of albumin by a linker.

11. The albumin fusion protein of any one of claims 1-8, wherein the albumin fusion protein has the following formula:

R1-L-R2; R2-L-R1; or R1-L-R2-L-R1,

wherein R1 is Therapeutic protein:X, or fragment or variant thereof, L is a peptide linker, and R2 is albumin comprising the amino acid sequence of SEQ ID NO:18 or fragment or variant of albumin.

12. The albumin fusion protein of any one of claims 1-11, wherein the shelf-life of the albumin fusion protein is greater than the shelf-life of the Therapeutic protein:X in an unfused state.

13. The albumin fusion protein of any one of claims 1-11, wherein the in vitro biological activity of the Therapeutic protein:X, or fragment or variant thereof, fused to albumin, or fragment or variant thereof, is greater than the in vitro biological activity of the Therapeutic protein:X, or a fragment or variant thereof, in an unfused state.

14. The albumin fusion protein of any one of claims 1-11, wherein the in vivo biological activity of the Therapeutic protein:X, or fragment or variant thereof, fused to albumin, or fragment or variant thereof, is greater than the in vivo biological activity of the Therapeutic protein:X , or a fragment or variant thereof, in an unfused state.

15.   An albumin fusion protein comprising a Therapeutic protein:X, or fragment or variant thereof, inserted into an albumin comprising the amino acid sequence of SEQ ID NO:18 or fragment or variant thereof.

16.   An albumin fusion protein comprising a Therapeutic protein:X, or fragment or variant thereof, inserted into an albumin comprising an amino acid sequence selected from the group consisting of:

    (a)   amino acids 54 to 61 of SEQ ID NO:18;

    (b)   amino acids 76 to 89 of SEQ ID NO:18;

    (c)   amino acids 92 to100 of SEQ ID NO:18;

    (d)   amino acids 170 to 176 of SEQ ID NO:18;

    (e)   amino acids 247 to 252 of SEQ ID NO:18;

    (f)   amino acids 266 to 277 of SEQ ID NO:18;

    (g)   amino acids 280 to 288 of SEQ ID NO:18;

    (h)   amino acids 362 to 368 of SEQ ID NO:18;

    (i)   amino acids 439 to 447 of SEQ ID NO:18;

    (j)   amino acids 462 to 475 of SEQ ID NO:18;

    (k)   amino acids 478 to 486 of SEQ ID NO:18; and

    (l)   amino acids 560 to 566 of SEQ ID NO:18.

17.   The albumin fusion protein of claims 15 or 16, wherein said albumin fusion protein comprises a portion of albumin sufficient to prolong the shelf-life of the Therapeutic protein:X, or fragment or variant thereof, as compared to the shelf-life of the Therapeutic protein:X , or a fragment or variant thereof, in an unfused state.

18.   The albumin fusion protein of claims 15 or 16, wherein said albumin fusion protein comprises a portion of albumin sufficient to prolong the in vitro biological activity of the Therapeutic protein:X, or fragment or variant thereof, fused to albumin as compared to the in vitro biological activity of the Therapeutic protein:X , or a fragment or variant thereof, in an unfused state.

19.   The albumin fusion protein of claims 15 or 16 wherein said albumin fusion protein comprises a portion of albumin sufficient to prolong the in vivo biological activity

of the Therapeutic protein:X, or fragment or variant thereof, fused to albumin compared to the in vivo biological activity of the Therapeutic protein:X , or a fragment or variant thereof, in an unfused state.

20.   The albumin fusion protein of any one of claims 1-19, which is non-glycosylated.

21.   The albumin fusion protein of any one of claims 1-19, which is expressed in yeast.

22.   The albumin fusion protein of claim 21, wherein the yeast is glycosylation deficient.

23.   The albumin fusion protein of claim 21 wherein the yeast is glycosylation and protease deficient.

24.   The albumin fusion protein of any one of claims 1-19, which is expressed by a mammalian cell.

25.   The albumin fusion protein of any one of claims 1-19, wherein the albumin fusion protein is expressed by a mammalian cell in culture.

26.   The albumin fusion protein of any one of claims 1-19, wherein the albumin fusion protein further comprises a secretion leader sequence.

27.   A composition comprising the albumin fusion protein of any one of claims 1-26 and a pharmaceutically acceptable carrier.

28.   A kit comprising the composition of claim 27.

29.   A method of treating a disease or disorder in a patient, comprising the step of administering the albumin fusion protein of any one of claims 1-26.

30.   The method of claim 29, wherein the disease or disorder comprises indication:Y.

31.   A method of treating a patient with a disease or disorder that is modulated by Therapeutic protein:X, or fragment or variant thereof, comprising the step of administering an effective amount of the albumin fusion protein of any one of claims 1-26.

32.   The method of claim 31, wherein the disease or disorder is indication:Y.

33.   A method of extending the shelf life of Therapeutic protein:X comprising the step of fusing the Therapeutic protein:X, or fragment or variant thereof, to albumin or a fragment or variant thereof, sufficient to extend the shelf-life of the Therapeutic protein:X, or fragment or variant thereof, compared to the shelf-life of the Therapeutic protein:X, or a fragment or variant thereof, in an unfused state.

34.   A nucleic acid molecule comprising a polynucleotide sequence encoding the albumin fusion protein of any one of claims 1-26.

35.   A vector comprising the nucleic acid molecule of claim 34.

36.   A host cell comprising the nucleic acid molecule of claim 35.

1/20
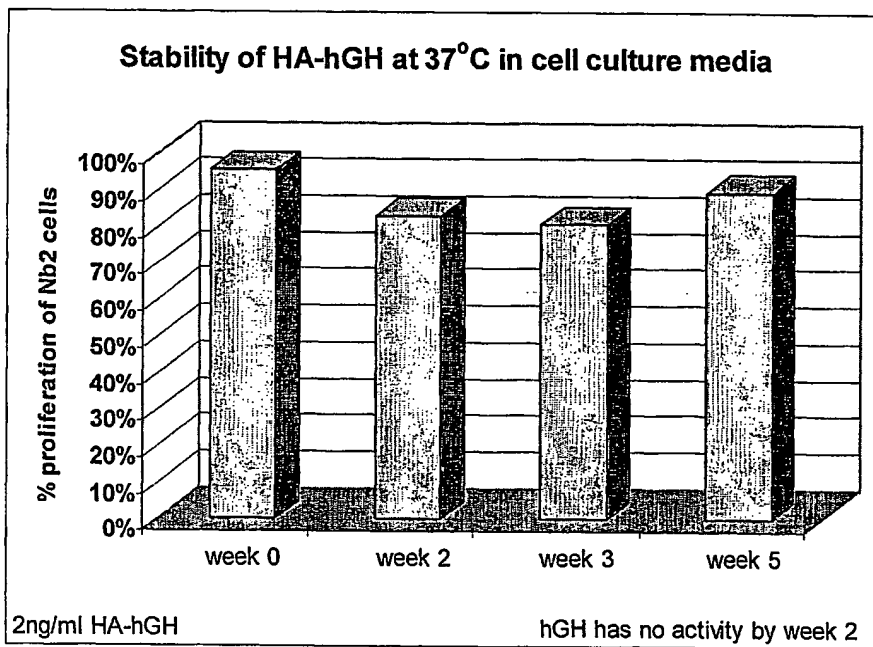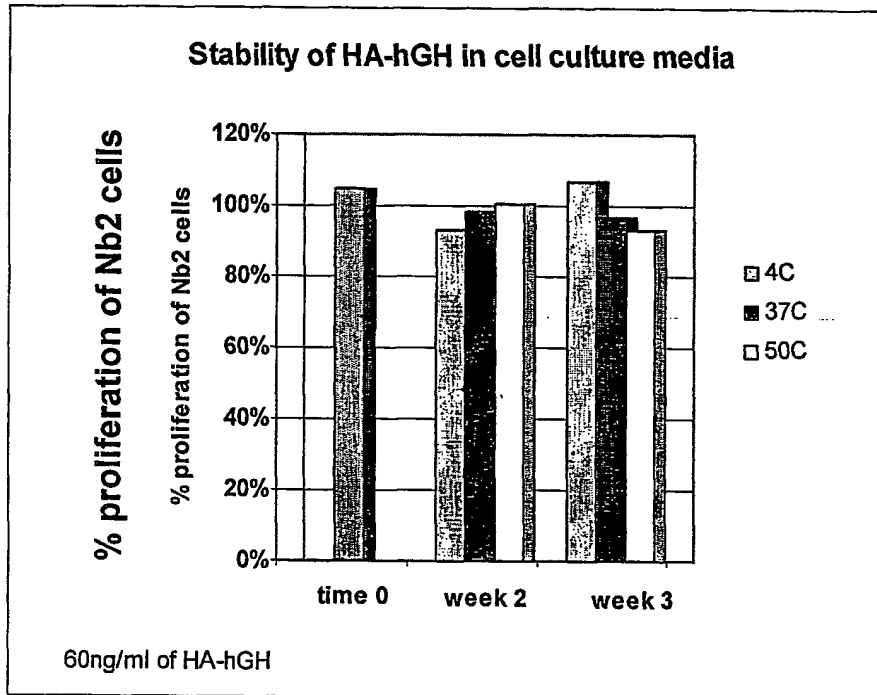
Figure 1

Figure 2

3/20
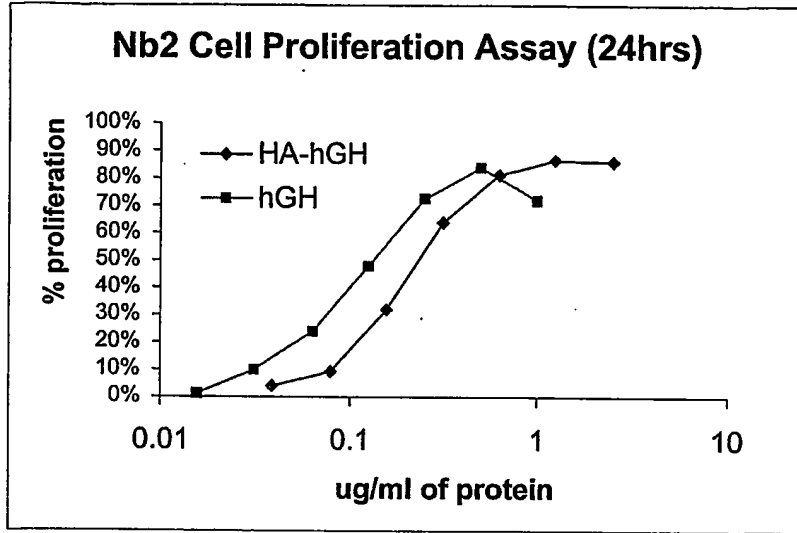
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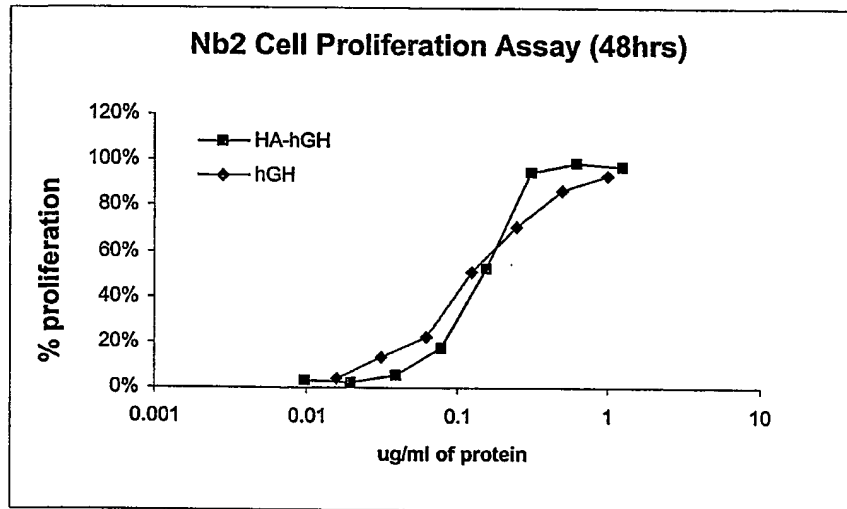
Figure 3B

4/20
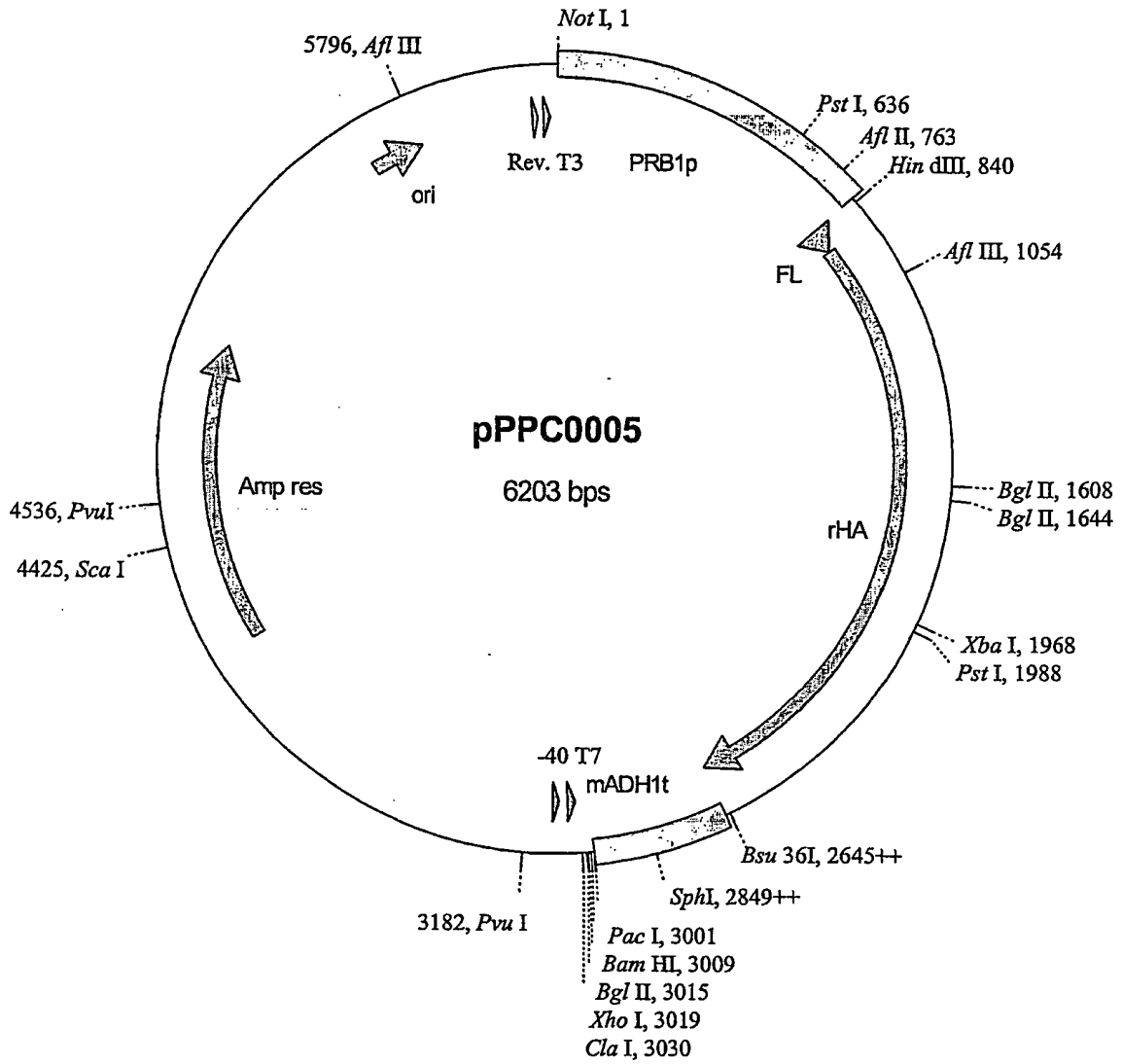
Figure 4

5/20
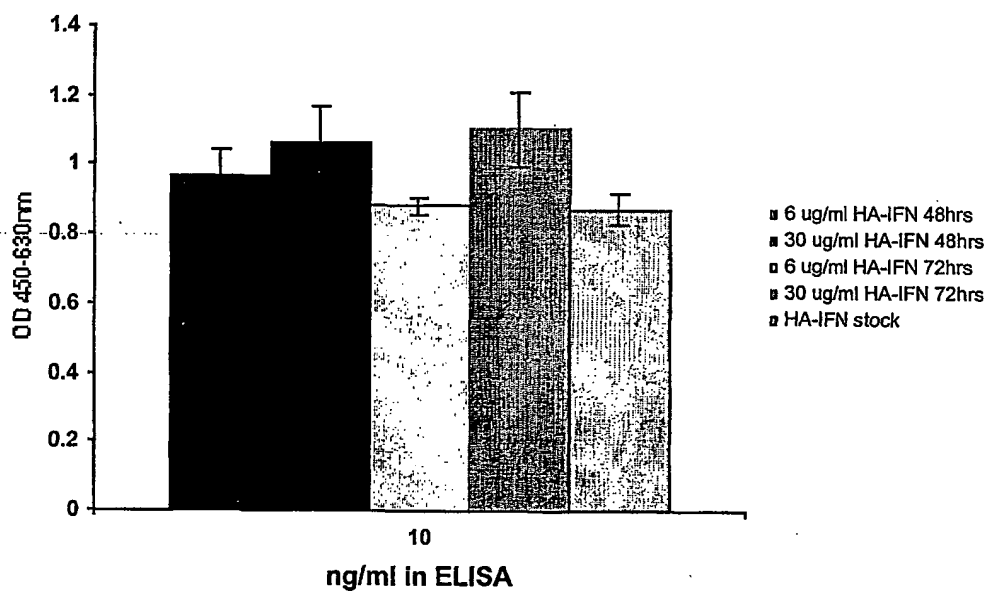
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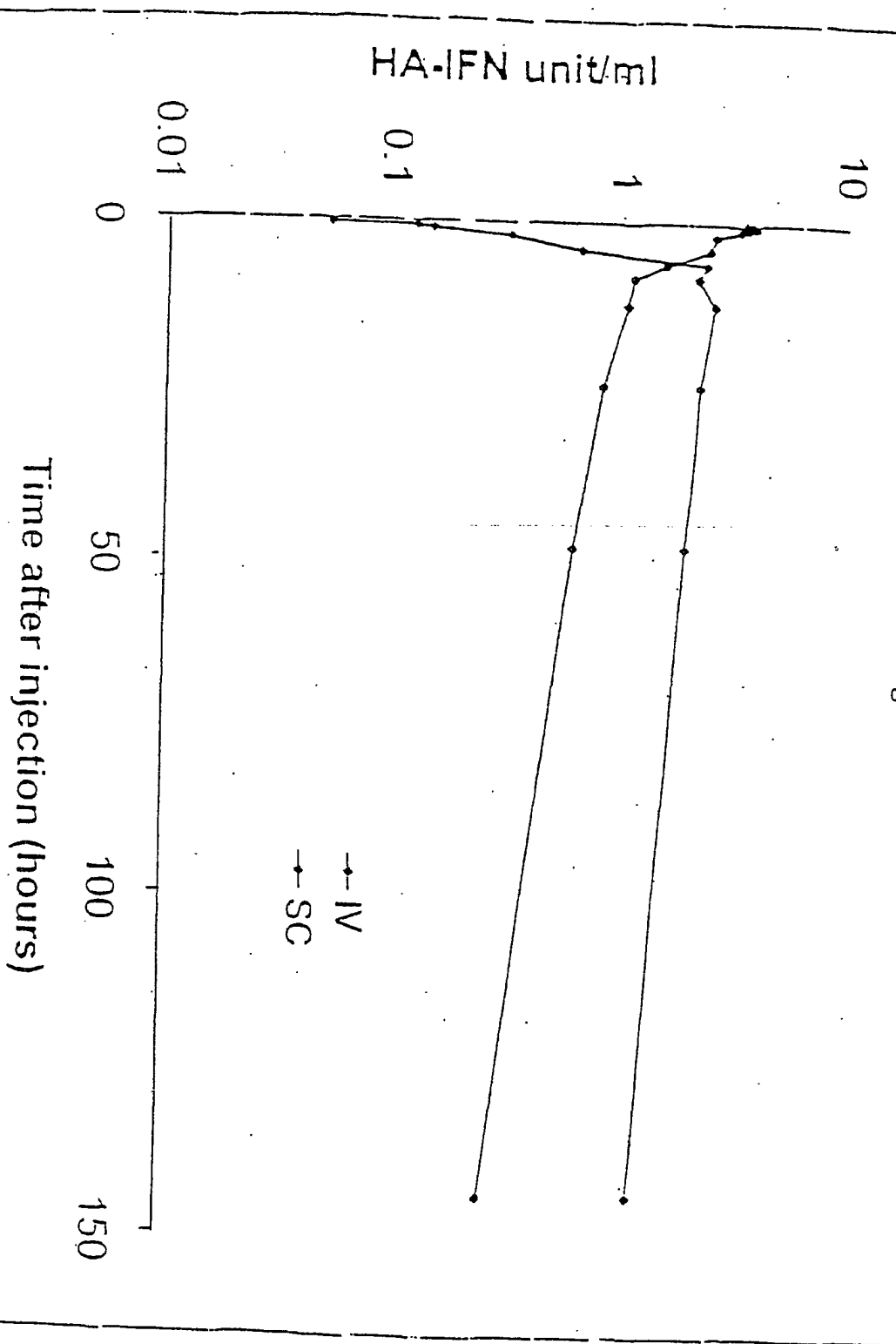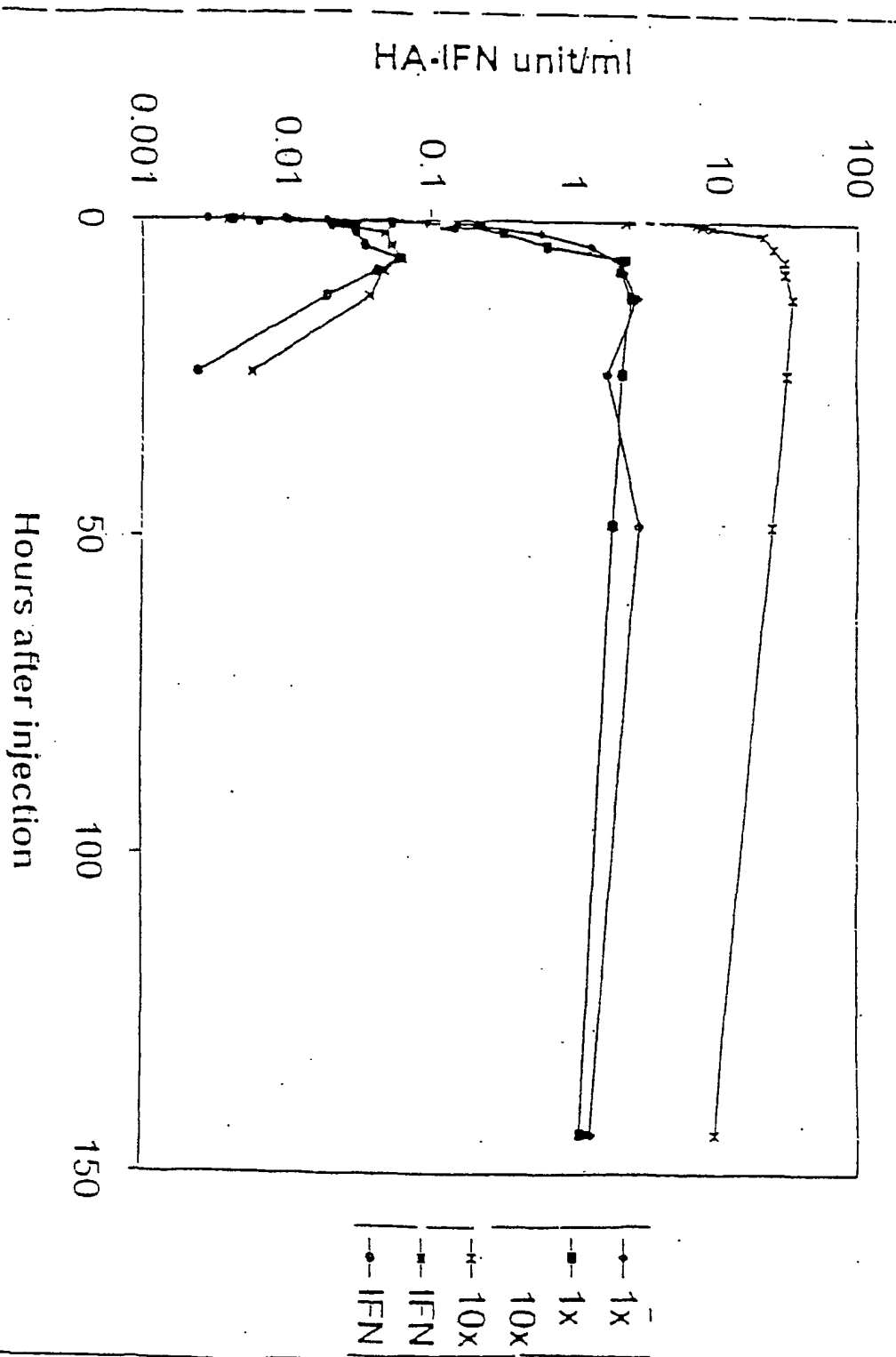
Figure 6

Figure 7
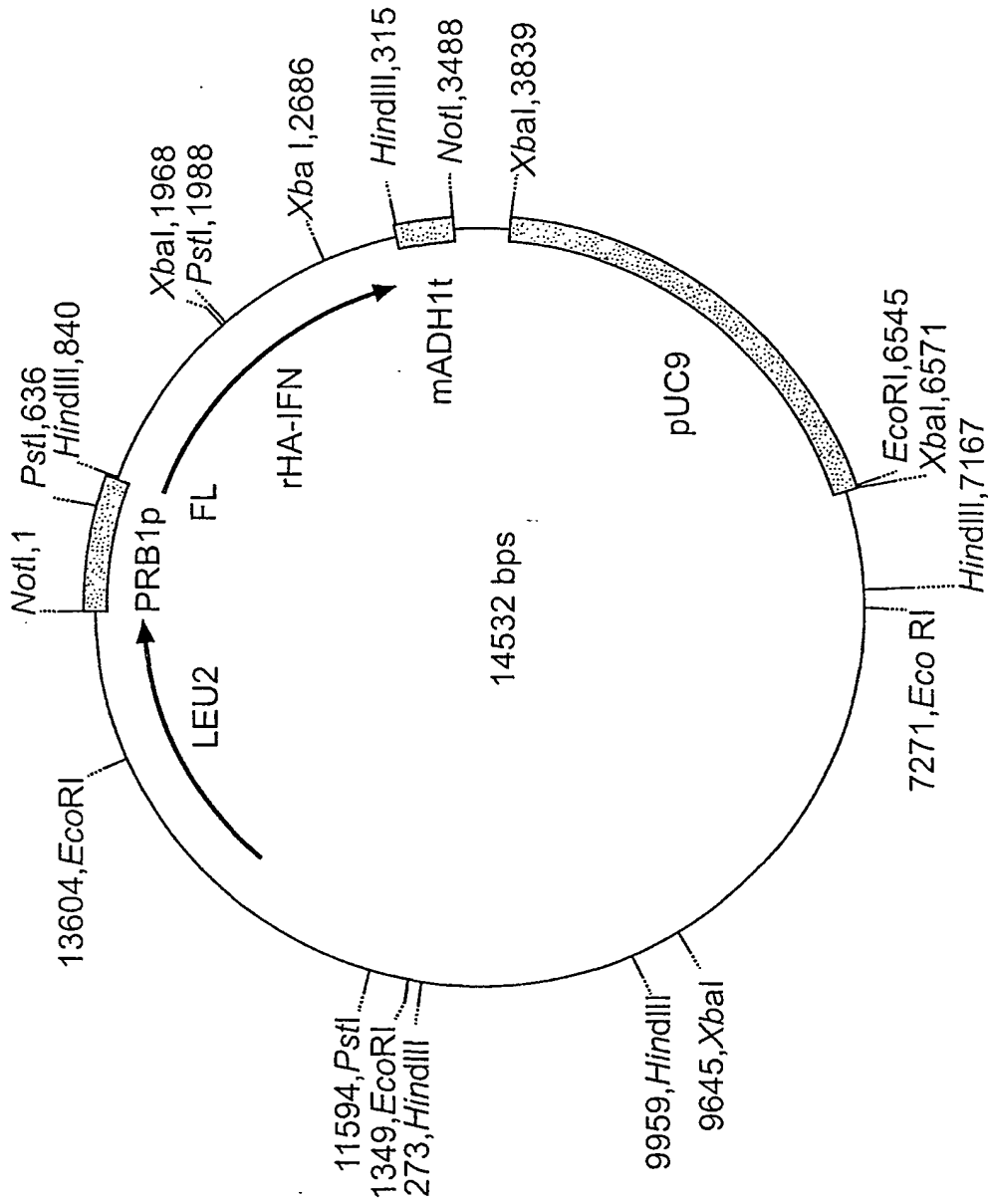
FIG. 8

Localisation of 'Loops' based on the HA Crystal Structure which could be used for Mutation/Insertion

```
1    DAHKSEVAHR FKDLGEENFK ALVLIAFAQY LQQCPFEDHV KLVNEVTEFA
     HHHHH HHH       HHH HHHHHHHHH       HHHHH HHHHHHHHHH

           I                        II        III
51   KTCVADESAE NCDKSLHTLF GDKLCTVATL RETYGEMADC CAKOEPERNE
     HHHHH              HHHHH HHHHH              HHHH H      HHHH

101  CFLQHKDDNP NLPRLVRPEV DVMCTAFHDN EETFLKKYLY EIARRHPYFY
     HHHH                H HHHHHHHH      HHHHHHHH HHHHH

                              IV
151  APELLFFAKR YKAAFTECCO AADKAACLLP KLDELRDEGK ASSAKQRLKC
     HHHHHHHHHH HHHHHHHHH       HHHHH HHHEHHHHHH HHHHHHHHHH

                                                         V
201  ASLQKFGERA FKAWAVARLS QRFPKAEFAE VSKLVTDLTK VHTECCHGDL
     HHHHH    HH HHHHHHHHHH HH      HHH HHHHHHHHHH HHHHHH  HH

                    VI             VII
251  LECADDRADL AKYICENODS ISSKLKECCE KPLLEKSHCI AEVENDEMPA
     HHHHHHHHHH HHHHH          HHHHH     HHHHHHH H

301  DLPSLAADFV ESKDVCKNYA EAKDVFLGMF LYEYARRHPD YSVVLLLRLA
         HHHH         HHHHH      HHHHHHH HHHHHH        HHHHHHH

            VIII
351  KTYETTLEKC CAAADPHECY AKVFDEFKPL VEEPQNLIKQ NCELFEQLGE
     HHHHHHHHHH        HH      H    HHHHH HHHHHHHHHH HHHHHH

                                             IX
401  YKFQNALLVR YTKKVPQVST PTLVEVSRNL GKVGSKCCKH PEAKRMPCAE
     HHHHHHHHHH HHHH      H HHHHHHHHHH     HHH        HHHHHHHH

              X              XI
451  DYLSVVLNQL CVLHEKTPVS DRVTKCCTES LVNRRPPCFSA LEVDETYVPK
     HHHHHHHHHH HHHHH         HHHHHHHHH      HHHHHHH

501  EFNAETFTFH ADICTLSEKE RQIKKQTALV ELVKHKPKAT KEQLKAVMDD
                  HHH    HHH HHHHMMEHHH HHH           HHHHHHHH

              XII
551  FAAFVEKCCK ADDKETCFAE EGKKLVAASQ AALGL
     HHHHHHHH            HHHH HHHHHHHHHH HH
```

Loop		Loop	
I	Val54-Asn61	VII	Glu280-His288
II	Thr76-Asp89	VIII	Ala362-Glu368
III	Ala92-Glu100	IX	Lys439-Pro447
IV	Gln170-Ala176	X	Val462-Lys475
V	His247-Glu252	XI	Thr478-Pro486
VI	Glu266-Glu277	XII	Lys560-Thr566

Figure 9

Examples of Modifications to Loop IV

a. Randomisation of Loop IV.

```
                            IV
151   APELLFFAKR YKAAFTECCQ AADKAACLLP KLDELRDEGK ASSAKQRLKC
      HHHHHHHHHH HHHHHHHHH        HHHHH HHHHHHHHHH HHHHHHHHHH


                            IV
151   APELLFFAKR YKAAFTECCX XXXXXXCLLP KLDELRDEGK ASSAKQRLKC
      HHHHHHHHHH HHHHHHHHH        HHHHH HHHHHHHHHH HHHHHHHHHH
```

X represents the mutation of the natural amino acid to any other amino acid. One, more or all of the amino acids can be changed in this manner. This figure indicates all the residues have been changed.

b. Insertion (or replacement) of Randomised sequence into Loop IV.

$$(X)_n$$
$$\downarrow$$

IV

```
151   APELLFFAKR YKAAFTECCQ AADKAACLLP KLDELRDEGK ASSAKQRLKC
      HHHHHHHHHH HHHHHHHHH        HHHHH HHHHHHHHHH HHHHHHHHHH
```

The insertion can be at any point on the loop and the length a length where n would typically be 6, 8, 12, 20 or 25.

Figure 10

11/20
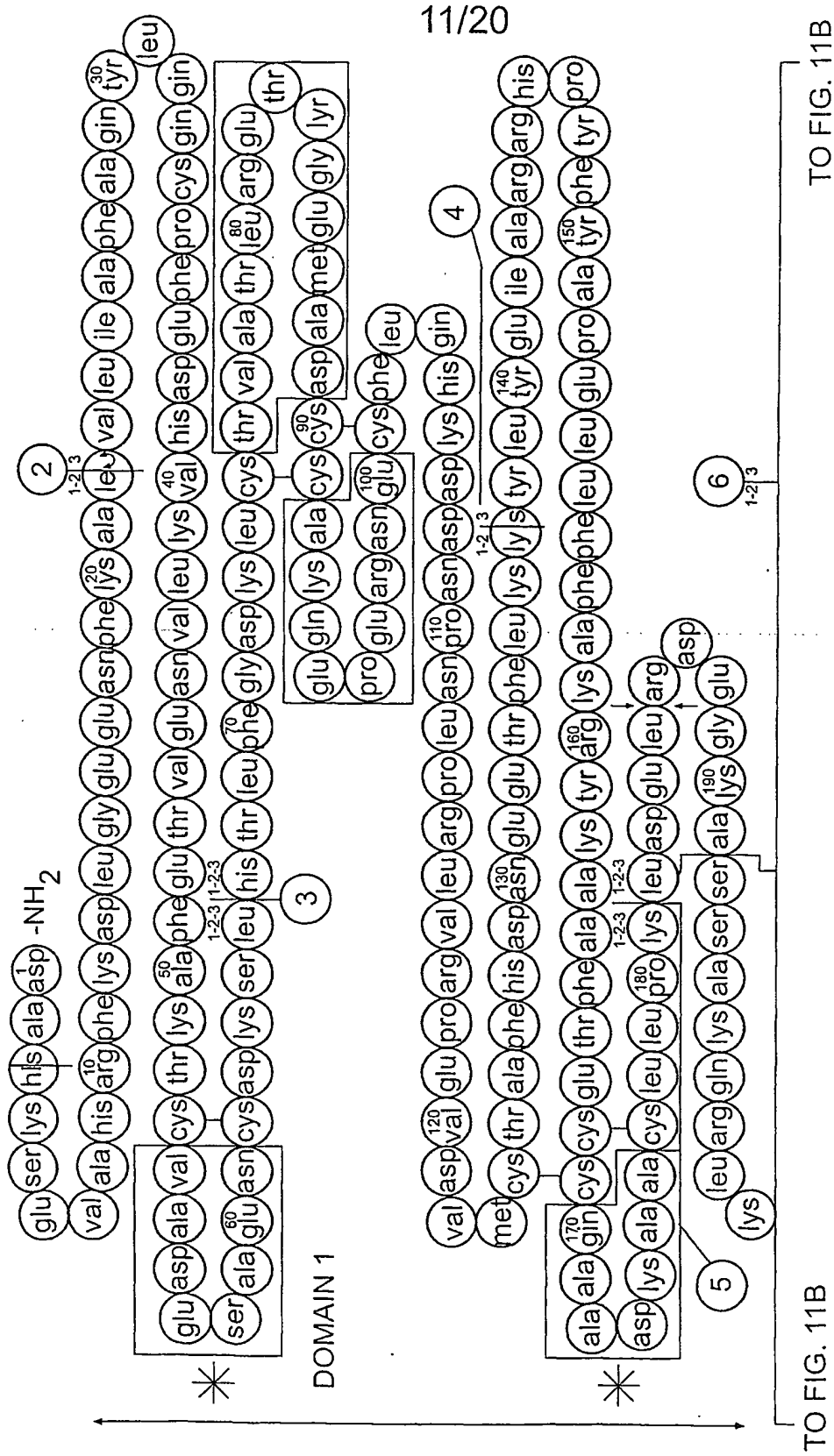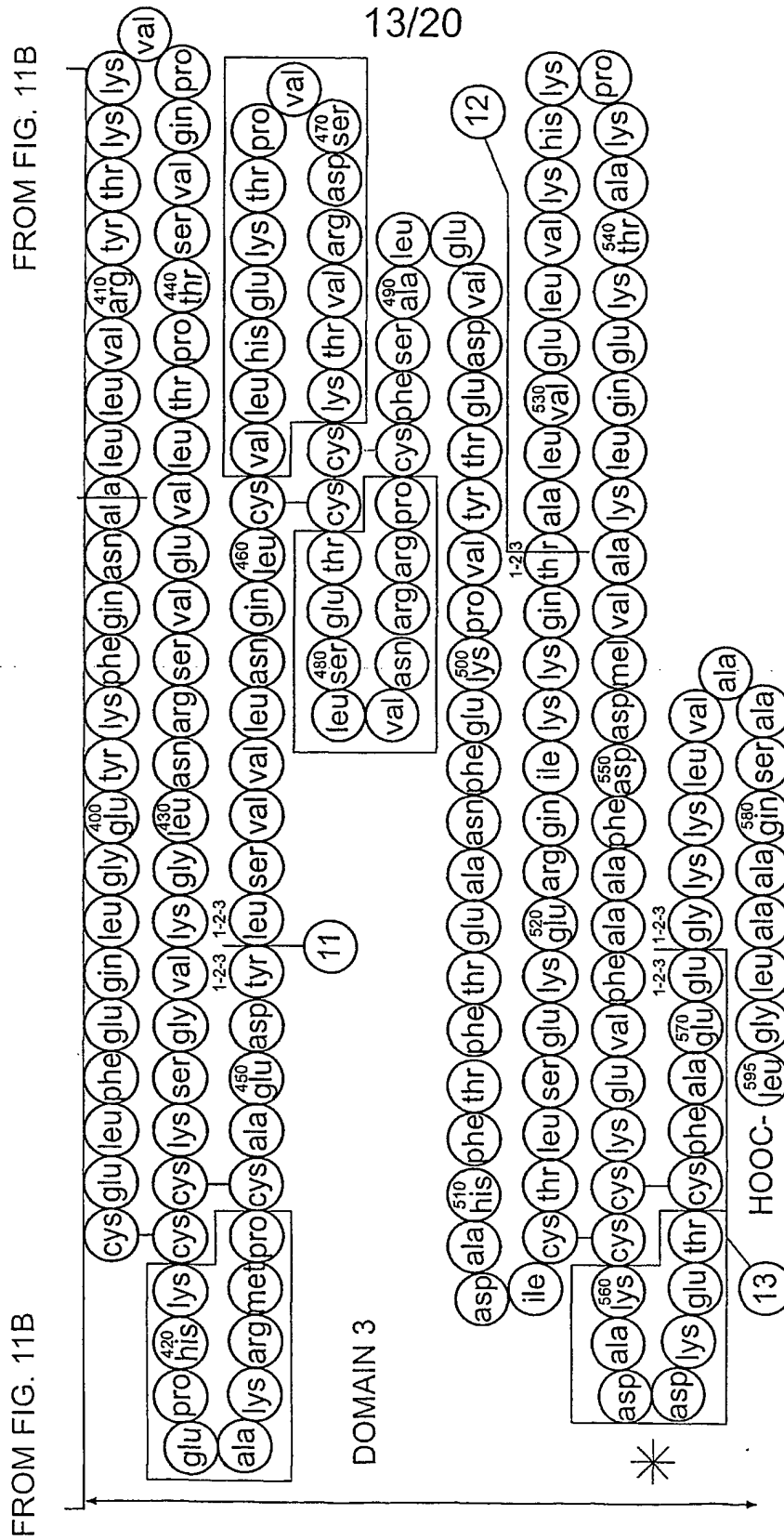
FIG. 11A

FIG. 11B

FIG. 11C
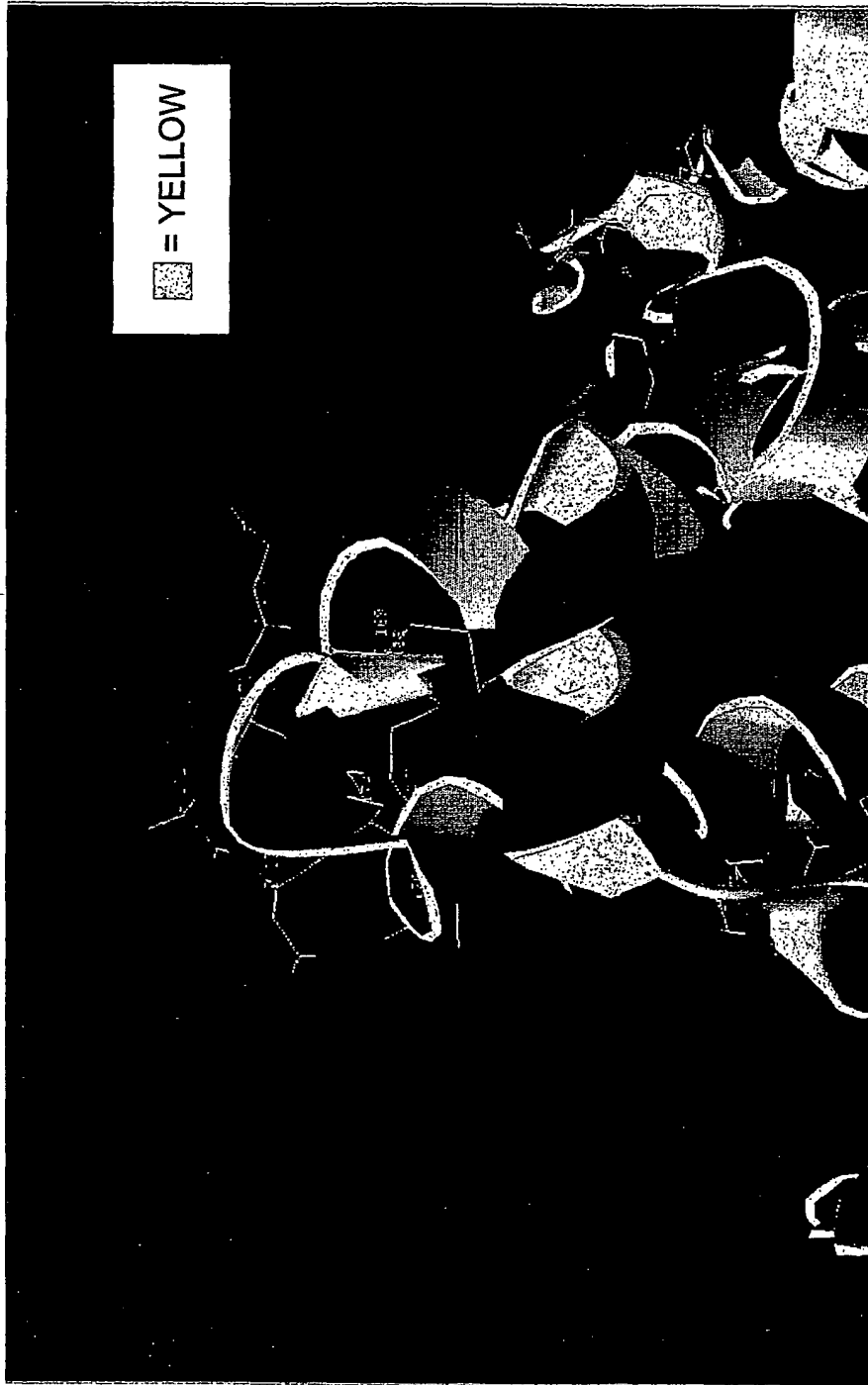
= YELLOW

DISULFIDE BONDS SHOWN IN YELLOW

FIG. 12:
LOOP IV GLU170-A176

15/20
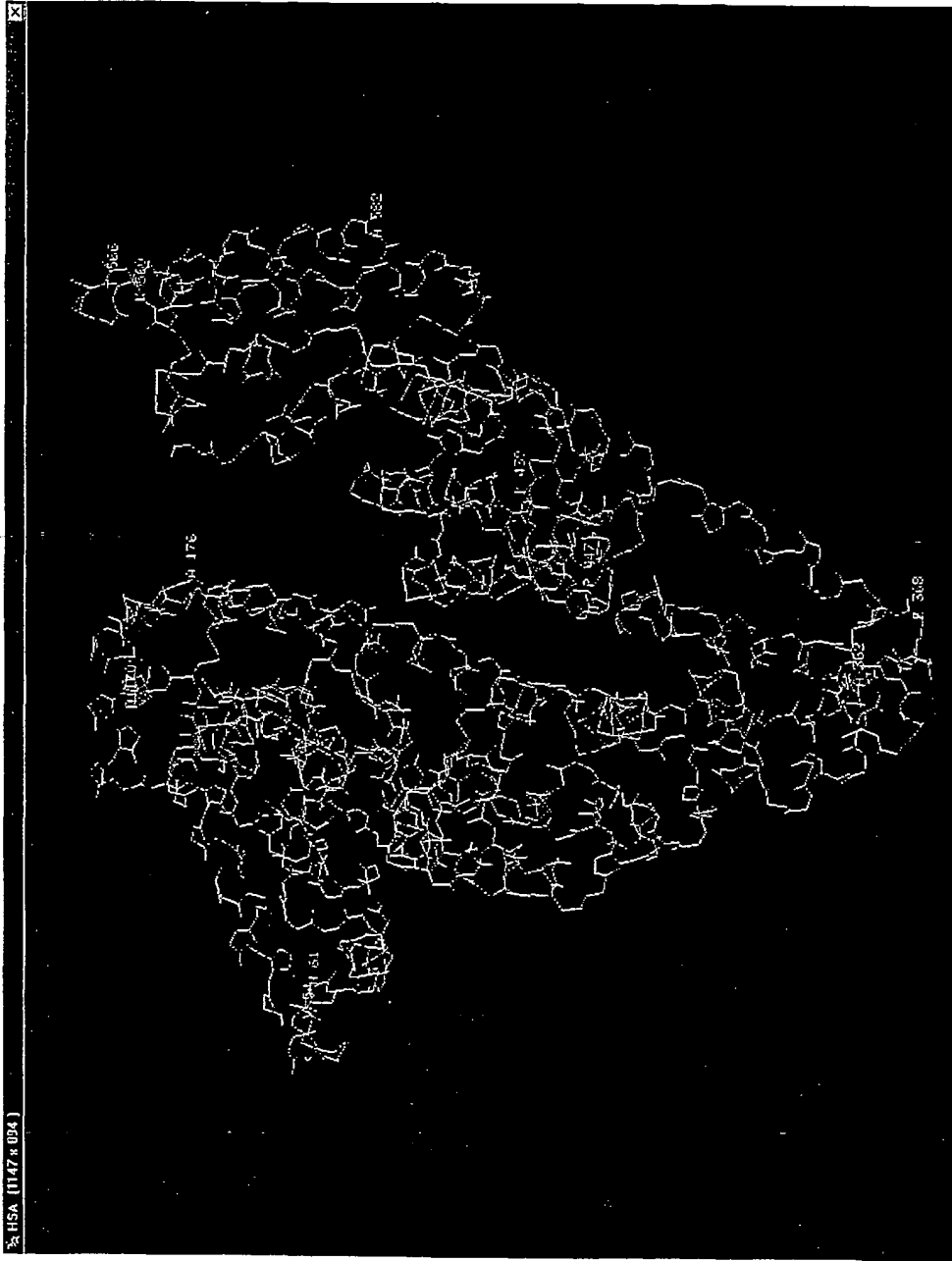
FIG. 13
TERTIARY STRUCTURE OF HA
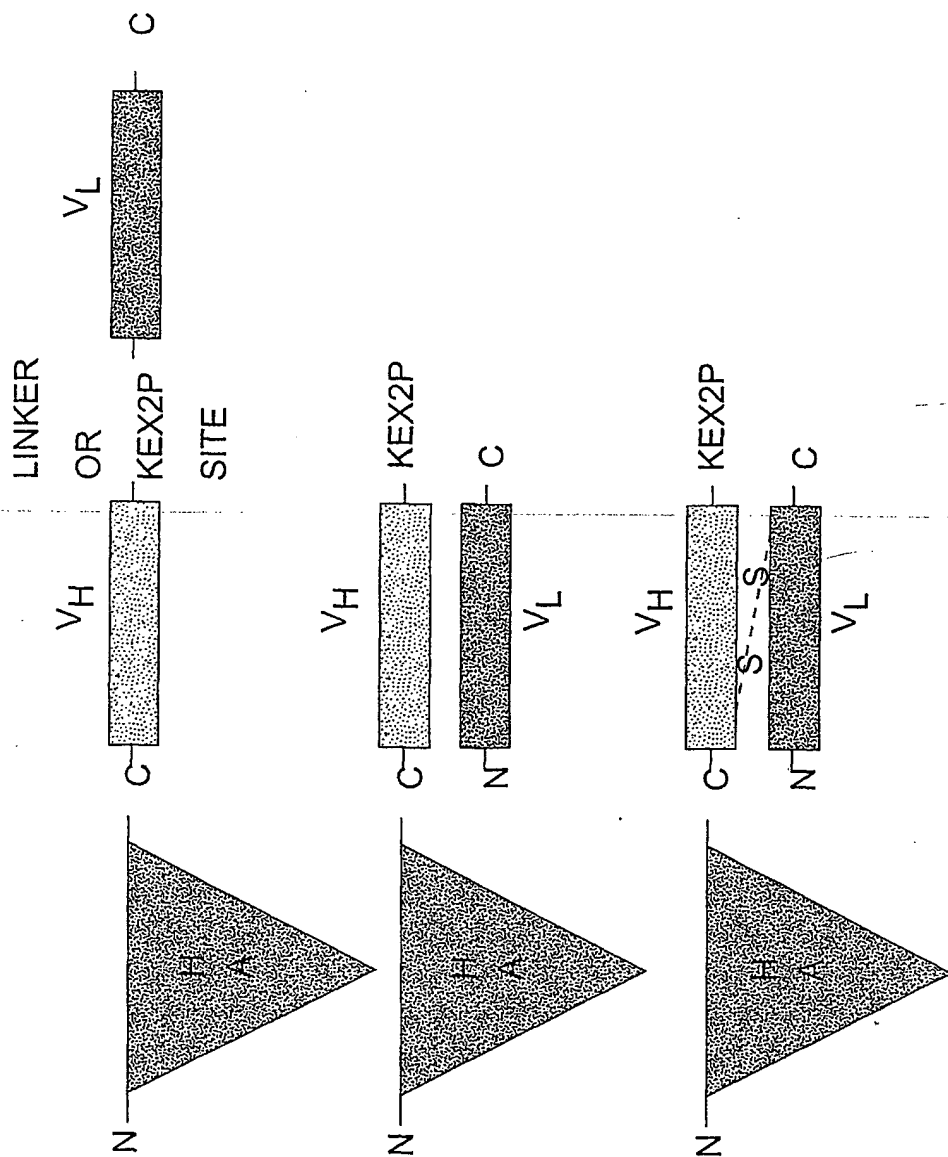
FIG. 14

```
  1  GAT GCA CAC AAG AGT GAG GTT GCT CAT CGG TTT AAA GAT TTG GGA GAA GAA AAT TTC AAA  60
  1   D   A   H   K   S   E   V   A   H   R   F   K   D   L   G   E   E   N   F   K   20

 61  GCC TTG GTG TTG ATT GCC TTT GCT CAG TAT CTT CAG CAG TGT CCA TTT GAA GAT CAT GTA 120
 21   A   L   V   L   I   A   F   A   Q   Y   L   Q   Q   C   P   F   E   D   H   V   40

121  AAA TTA GTG AAT GAA GTA ACT GAA TTT GCA AAA ACA TGT GTT GCT GAT GAG TCA GCT GAA 180
 41   K   L   V   N   E   V   T   E   F   A   K   T   C   V   A   D   E   S   A   E   60

181  AAT TGT GAC AAA TCA CTT CAT ACC CTT TTT GGA GAC AAA TTA TGC ACA GTT GCA ACT CTT 240
 61   N   C   D   K   S   L   H   T   L   F   G   D   K   L   C   T   V   A   T   L   80

241  CGT GAA ACC TAT GGT GAA ATG GCT GAC TGC TGT GCA AAA CAA GAG CCT GAG AGA AAT GAA 300
 81   R   E   T   Y   G   E   M   A   D   C   C   A   K   Q   E   P   E   R   N   E  100

301  TGC TTC TTG CAA CAC AAA GAT GAC AAC CCA AAC CTC CCC CGA TTG GTG AGA CCA GAG GTT 360
101   C   F   L   Q   H   K   D   D   N   P   N   L   P   R   L   V   R   P   E   V  120

361  GAT GTG ATG TGC ACT GCT TTT CAT GAC AAT GAA GAG ACA TTT TTG AAA TAC TTA TAT 420
121   D   V   M   C   T   A   F   H   D   N   E   E   T   F   L   K   Y   L   Y  140

421  GAA ATT GCC AGA AGA CAT CCT TAC TTT TAT GCC CCG GAA CTC CTT TTC TTT GCT AAA AGG 480
141   E   I   A   R   R   H   P   Y   F   Y   A   P   E   L   L   F   F   A   K   R  160
```

Figure 15A

```
481 TAT AAA GCT GCT TTT ACA GAA TGT TGC CAA GCT GCT GAT AAA GCT GCC TGC CTG TTG CCA 540
161  Y   K   A   A   F   T   E   C   C   Q   A   A   D   K   A   A   C   L   L   P  180

541 AAG CTC GAT GAA CTT CGG GAT GAA GGG AAG GCT TCG TCT GCC AAA CAG AGA CTC AAA TGT 600
181  K   L   D   E   L   R   D   E   G   K   A   S   S   A   K   Q   R   L   K   C  200

601 GCC AGT CTC CAA AAA TTT GGA GAA AGA GCT TTC AAA GCA TGG GCA GTG GCT CGC CTG AGC 660
201  A   S   L   Q   K   F   G   E   R   A   F   K   A   W   A   V   A   R   L   S  220

661 CAG AGA TTT CCC AAA GCT GAG TTT GCA GAA GTT TCC AAG TTA GTG ACA GAT CTT ACC AAA 720
221  Q   R   F   P   K   A   E   F   A   E   V   S   K   L   V   T   D   L   T   K  240

721 GTC CAC ACG GAA TGC TGC CAT GGA GAT CTT GAA TGT GCT GAT GAC AGG GCG GAC CTT 780
241  V   H   T   E   C   C   H   G   D   L   E   C   A   D   D   R   A   D   L  260

781 GCC AAG TAT ATC TGT GAA AAT CAG GAT TCG ATC TCC AGT AAA CTG AAG GAA TGC TGT GAA 840
261  A   K   Y   I   C   E   N   Q   D   S   I   S   K   L   K   E   C   C   E  280

841 AAA CCT CTG TTG GAA AAA TCC CAC TGC ATT GCC GAA GTG GAA AAT GAT GAG ATG CCT GCT 900
281  K   P   L   L   E   K   S   H   C   I   A   E   V   E   N   D   E   M   P   A  300

901 GAC TTG CCT TCA TTA GCT GCT GAT TTT GTT GAA AGT AAG GAT GTT TGC AAA AAC TAT GCT 960
301  D   L   P   S   L   A   A   D   F   V   E   S   K   D   V   C   K   N   Y   A  320
```

Figure 15B

```
961  GAG GCA AAG GAT GTC TTC CTG GGC ATG TTT TTG TAT GAA TAT GCA AGA AGG CAT CCT GAT 1020
321   E   A   K   D   V   F   L   G   M   F   L   Y   E   Y   A   R   R   H   P   D  340

1021 TAC TCT GTC GTG CTG CTG AGA CTT GCC AAG ACA TAT GAA ACC ACT CTA GAG AAG TGC     1080
341   Y   S   V   V   L   L   R   L   A   K   T   Y   E   T   T   L   E   K   C      360

1081 TGT GCC GCT GCA GAT CCT CAT GAA TGC TAT GCC AAA GTG TTC GAT GAA TTT AAA CCT CTT 1140
361   C   A   A   D   P   H   E   C   Y   A   K   V   F   D   E   F   K   P   L      380

1141 GTG GAA GAG CCT CAG AAT TTA ATC AAA CAA AAC TGT GAG CTT TTT GAG CAG CTT GGA GAG 1200
381   V   E   E   P   Q   N   L   I   K   Q   N   C   E   L   F   E   Q   L   G   E  400

1201 TAC AAA TTC CAG AAT GCG CTA TTA GTT CGT TAC ACC AAG AAA GTA CCC CAA GTG TCA ACT 1260
401   Y   K   F   Q   N   A   L   L   V   R   Y   T   K   K   V   P   Q   V   S   T  420

1261 CCA ACT CTT GTA GAG GTC TCA AGA AAC CTA GGA AAA GTG GGC AGC AAA TGT TGT AAA CAT 1320
421   P   T   L   V   E   V   S   R   N   L   G   K   V   G   S   K   C   C   K   H  440

1321 CCT GAA GCA AAA AGA ATG CCC TGT GCA GAA GAC TAT CTA TCC GTG GTC CTG AAC CAG TTA 1380
441   P   E   A   K   R   M   P   C   A   E   D   Y   L   S   V   V   L   N   Q   L  460

1381 TGT GTG TTG CAT GAG AAA ACG CCA GTA AGT GAC AGA GTC ACA AAA TGC TGC ACA GAG TCC 1440
461   C   V   L   H   E   K   T   P   V   S   D   R   V   T   K   C   C   T   E   S  480
```

Figure 15C

```
1441 TTG GTG AAC AGG CGA CCA TGC TTT TCA GCT CTG GAA GTC GAT GAA ACA TAC GTT CCC AAA 1500
481   L   V   N   R   R   P   C   F   S   A   L   E   V   D   E   T   Y   V   P   K  500

1501 GAG TTT AAT GCT GAA ACA TTC ACC TTC CAT GCA GAT ATA TGC ACA CTT TCT GAG AAG GAG 1560
501   E   F   N   A   E   T   F   T   F   H   A   D   I   C   T   L   S   E   K   E  520

1561 AGA CAA ATC AAG AAA CAA ACT GCA CTT GTT GAG CTT GTG AAA CAC AAG CCC AAG GCA ACA 1620
521   R   Q   I   K   K   Q   T   A   L   V   E   L   V   K   H   K   P   K   A   T  540

1621 AAA GAG CAA CTG AAA GCT GTT ATG GAT GAT TTC GCA GCT TTT GTA GAG AAG TGC TGC AAG 1680
541   K   E   Q   L   K   A   V   M   D   D   F   A   A   F   V   E   K   C   C   K  560

1681 GCT GAC GAT AAG GAG ACC TGC TTT GCC GAG GAG GGT AAA AAA CTT GTT GCT GCA AGT CAA 1740
561   A   D   D   K   E   T   C   F   A   E   E   G   K   K   L   V   A   A   S   Q  580

1741 GCT GCC TTA TAA GGC TTA CAT CTA CAT TTA AAA GCA TCT CAG 1782
581   A   A   L   *   G   L                                   585
```

Figure 15D

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<130> PF546PCT

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<223> first 5 amino acids of mature human serum albumin

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 1   5   10   15

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3

fragments with non-cohesive ends.

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ac   62

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gat gca cac aag agt gag gtt gct cat cgg ttt aaa gat ttg gga gaa   48
Asp Ala His Lys Ser Glu Val Ala His Arg Phe Lys Asp Leu Gly Glu
 1   5   10   15

gaa aat ttc aaa gcc ttg gtg ttg att gcc ttt gct cag tat ctt cag   96
Glu Asn Phe Lys Ala Leu Val Leu Ile Ala Phe Ala Gln Tyr Leu Gln
                20   25   30

cag tgt cca ttt gaa gat cat gta aaa tta gtg aat gaa gta act gaa   144
Gln Cys Pro Phe Glu Asp His Val Lys Leu Val Asn Glu Val Thr Glu
            35   40   45

ttt gca aaa aca tgt gtt gct gat gag tca gct gaa aat tgt gac aaa   192
Phe Ala Lys Thr Cys Val Ala Asp Glu Ser Ala Glu Asn Cys Asp Lys
        50   55   60

tca ctt cat acc ctt ttt gga gac aaa tta tgc aca gtt gca act ctt   240
Ser Leu His Thr Leu Phe Gly Asp Lys Leu Cys Thr Val Ala Thr Leu
 65   70   75   80

cgt gaa acc tat ggt gaa atg gct gac tgc tgt gca aaa caa gaa cct   288
Arg Glu Thr Tyr Gly Glu Met Ala Asp Cys Cys Ala Lys Gln Glu Pro
                85   90   95

gag aga aat gaa tgc ttc ttg caa cac aaa gat gac aac cca aac ctc   336
Glu Arg Asn Glu Cys Phe Leu Gln His Lys Asp Asp Asn Pro Asn Leu
                100   105   110

ccc cga ttg gtg aga cca gag gtt gat gtg atg tgc act gct ttt cat   384
Pro Arg Leu Val Arg Pro Glu Val Asp Val Met Cys Thr Ala Phe His
            115   120   125

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gac aat gaa gag aca ttt ttg aaa aaa tac tta tat gaa att gcc aga    432
Asp Asn Glu Glu Thr Phe Leu Lys Lys Tyr Leu Tyr Glu Ile Ala Arg
    130             135             140

aga cat cct tac ttt tat gcc ccg gaa ctc ctt ttc ttt gct aaa agg    480
Arg His Pro Tyr Phe Tyr Ala Pro Glu Leu Leu Phe Phe Ala Lys Arg
145             150             155             160

tat aaa gct gct ttt aca gaa tgt tgc caa gct gct gat aaa gct gcc    528
Tyr Lys Ala Ala Phe Thr Glu Cys Cys Gln Ala Ala Asp Lys Ala Ala
            165             170             175

tgc ctg ttg cca aag ctc gat gaa ctt cgg gat gaa ggg aag gct tcg    576
Cys Leu Leu Pro Lys Leu Asp Glu Leu Arg Asp Glu Gly Lys Ala Ser
        180             185             190

tct gcc aaa cag aga ctc aaa tgt gcc agt ctc caa aaa ttt gga gaa    624
Ser Ala Lys Gln Arg Leu Lys Cys Ala Ser Leu Gln Lys Phe Gly Glu
        195             200             205

aga gct ttc aaa gca tgg gca gtg gct cgc ctg agc cag aga ttt ccc    672
Arg Ala Phe Lys Ala Trp Ala Val Ala Arg Leu Ser Gln Arg Phe Pro
    210             215             220

aaa gct gag ttt gca gaa gtt tcc aag tta gtg aca gat ctt acc aaa    720
Lys Ala Glu Phe Ala Glu Val Ser Lys Leu Val Thr Asp Leu Thr Lys
225             230             235             240

gtc cac acg gaa tgc tgc cat gga gat ctg ctt gaa tgt gct gat gac    768
Val His Thr Glu Cys Cys His Gly Asp Leu Leu Glu Cys Ala Asp Asp
            245             250             255

agg gcg gac ctt gcc aag tat atc tgt gaa aat cag gat tcg atc tcc    816
Arg Ala Asp Leu Ala Lys Tyr Ile Cys Glu Asn Gln Asp Ser Ile Ser
        260             265             270

agt aaa ctg aag gaa tgc tgt gaa aaa cct ctg ttg gaa aaa tcc cac    864
Ser Lys Leu Lys Glu Cys Cys Glu Lys Pro Leu Leu Glu Lys Ser His
        275             280             285

tgc att gcc gaa gtg gaa aat gat gag atg cct gct gac ttg cct tca    912
Cys Ile Ala Glu Val Glu Asn Asp Glu Met Pro Ala Asp Leu Pro Ser
    290             295             300

tta gct gct gat ttt gtt gaa agt aag gat gtt tgc aaa aac tat gct    960
Leu Ala Ala Asp Phe Val Glu Ser Lys Asp Val Cys Lys Asn Tyr Ala
305             310             315             320

gag gca aag gat gtc ttc ctg ggc atg ttt ttg tat gaa tat gca aga   1008
Glu Ala Lys Asp Val Phe Leu Gly Met Phe Leu Tyr Glu Tyr Ala Arg
            325             330             335

agg cat cct gat tac tct gtc gtg ctg ctg ctg aga ctt gcc aag aca   1056
Arg His Pro Asp Tyr Ser Val Val Leu Leu Leu Arg Leu Ala Lys Thr
        340             345             350

tat gaa acc act cta gag aag tgc tgt gcc gct gca gat cct cat gaa   1104
Tyr Glu Thr Thr Leu Glu Lys Cys Cys Ala Ala Ala Asp Pro His Glu
        355             360             365
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6

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tgc tat gcc aaa gtg ttc gat gaa ttt aaa cct ctt gtg gaa gag cct   1152
Cys Tyr Ala Lys Val Phe Asp Glu Phe Lys Pro Leu Val Glu Glu Pro
    370             375             380

cag aat tta atc aaa caa aac tgt gag ctt ttt gag cag ctt gga gag   1200
Gln Asn Leu Ile Lys Gln Asn Cys Glu Leu Phe Glu Gln Leu Gly Glu
385             390             395             400

tac aaa ttc cag aat gcg cta tta gtt cgt tac acc aag aaa gta ccc   1248
Tyr Lys Phe Gln Asn Ala Leu Leu Val Arg Tyr Thr Lys Lys Val Pro
            405             410             415

caa gtg tca act cca act ctt gta gag gtc tca aga aac cta gga aaa   1296
Gln Val Ser Thr Pro Thr Leu Val Glu Val Ser Arg Asn Leu Gly Lys
        420             425             430

gtg ggc agc aaa tgt tgt aaa cat cct gaa gca aaa aga atg ccc tgt   1344
Val Gly Ser Lys Cys Cys Lys His Pro Glu Ala Lys Arg Met Pro Cys
        435             440             445

gca gaa gac tat cta tcc gtg gtc ctg aac cag tta tgt gtg ttg cat   1392
Ala Glu Asp Tyr Leu Ser Val Val Leu Asn Gln Leu Cys Val Leu His
    450             455             460

gag aaa acg cca gta agt gac aga gtc aca aaa tgc tgc aca gag tcc   1440
Glu Lys Thr Pro Val Ser Asp Arg Val Thr Lys Cys Cys Thr Glu Ser
465             470             475             480

ttg gtg aac agg cga cca tgc ttt tca gct ctg gaa gtc gat gaa aca   1488
Leu Val Asn Arg Arg Pro Cys Phe Ser Ala Leu Glu Val Asp Glu Thr
            485             490             495

tac gtt ccc aaa gag ttt aat gct gaa aca ttc acc ttc cat gca gat   1536
Tyr Val Pro Lys Glu Phe Asn Ala Glu Thr Phe Thr Phe His Ala Asp
        500             505             510

ata tgc aca ctt tct gag aag gag aga caa atc aag aaa caa act gca   1584
Ile Cys Thr Leu Ser Glu Lys Glu Arg Gln Ile Lys Lys Gln Thr Ala
        515             520             525

ctt gtt gag ctt gtg aaa cac aag ccc aag gca aca aaa gag caa ctg   1632
Leu Val Glu Leu Val Lys His Lys Pro Lys Ala Thr Lys Glu Gln Leu
        530             535             540

aaa gct gtt atg gat gat ttc gca gct ttt gta gag aag tgc tgc aag   1680
Lys Ala Val Met Asp Asp Phe Ala Ala Phe Val Glu Lys Cys Cys Lys
545             550             555             560

gct gac gat aag gag acc tgc ttt gcc gag gag ggt aaa aaa ctt gtt   1728
Ala Asp Asp Lys Glu Thr Cys Phe Ala Glu Glu Gly Lys Lys Leu Val
            565             570             575

gct gca agt caa gct gcc tta ggc tta taacatctac atttaaaagc atctcag 1782
Ala Ala Ser Gln Ala Ala Leu Gly Leu
        580             585
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<210> 18
<211> 585
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<212> PRT
<213> Homo Sapiens

<400> 18

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Glu Asn Phe Lys Ala Leu Val Leu Ile Ala Phe Ala Gln Tyr Leu Gln
        20   25   30

Gln Cys Pro Phe Glu Asp His Val Lys Leu Val Asn Glu Val Thr Glu
        35   40   45

Phe Ala Lys Thr Cys Val Ala Asp Glu Ser Ala Glu Asn Cys Asp Lys
    50   55   60

Ser Leu His Thr Leu Phe Gly Asp Lys Leu Cys Thr Val Ala Thr Leu
65   70   75   80

Arg Glu Thr Tyr Gly Glu Met Ala Asp Cys Cys Ala Lys Gln Glu Pro
                85   90   95

Glu Arg Asn Glu Cys Phe Leu Gln His Lys Asp Asp Asn Pro Asn Leu
        100   105   110

Pro Arg Leu Val Arg Pro Glu Val Asp Val Met Cys Thr Ala Phe His
        115   120   125

Asp Asn Glu Glu Thr Phe Leu Lys Lys Tyr Leu Tyr Glu Ile Ala Arg
    130   135   140

Arg His Pro Tyr Phe Tyr Ala Pro Glu Leu Leu Phe Phe Ala Lys Arg
145   150   155   160

Tyr Lys Ala Ala Phe Thr Glu Cys Cys Gln Ala Ala Asp Lys Ala Ala
            165   170   175

Cys Leu Leu Pro Lys Leu Asp Glu Leu Arg Asp Glu Gly Lys Ala Ser
        180   185   190

Ser Ala Lys Gln Arg Leu Lys Cys Ala Ser Leu Gln Lys Phe Gly Glu
        195   200   205

Arg Ala Phe Lys Ala Trp Ala Val Ala Arg Leu Ser Gln Arg Phe Pro
210   215   220

Lys Ala Glu Phe Ala Glu Val Ser Lys Leu Val Thr Asp Leu Thr Lys
225   230   235   240

Val His Thr Glu Cys Cys His Gly Asp Leu Leu Glu Cys Ala Asp Asp
            245   250   255

Arg Ala Asp Leu Ala Lys Tyr Ile Cys Glu Asn Gln Asp Ser Ile Ser
        260   265   270

Ser Lys Leu Lys Glu Cys Cys Glu Lys Pro Leu Leu Glu Lys Ser His
        275   280   285

Cys Ile Ala Glu Val Glu Asn Asp Glu Met Pro Ala Asp Leu Pro Ser
    290   295   300

8

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Leu Ala Ala Asp Phe Val Glu Ser Lys Asp Val Cys Lys Asn Tyr Ala
305                 310                 315                 320

Glu Ala Lys Asp Val Phe Leu Gly Met Phe Leu Tyr Glu Tyr Ala Arg
            325                 330                 335

Arg His Pro Asp Tyr Ser Val Val Leu Leu Leu Arg Leu Ala Lys Thr
            340                 345                 350

Tyr Glu Thr Thr Leu Glu Lys Cys Cys Ala Ala Ala Asp Pro His Glu
        355                 360                 365

Cys Tyr Ala Lys Val Phe Asp Glu Phe Lys Pro Leu Val Glu Glu Pro
    370                 375                 380

Gln Asn Leu Ile Lys Gln Asn Cys Glu Leu Phe Glu Gln Leu Gly Glu
385                 390                 395                 400

Tyr Lys Phe Gln Asn Ala Leu Leu Val Arg Tyr Thr Lys Lys Val Pro
            405                 410                 415

Gln Val Ser Thr Pro Thr Leu Val Glu Val Ser Arg Asn Leu Gly Lys
            420                 425                 430

Val Gly Ser Lys Cys Cys Lys His Pro Glu Ala Lys Arg Met Pro Cys
        435                 440                 445

Ala Glu Asp Tyr Leu Ser Val Val Leu Asn Gln Leu Cys Val Leu His
    450                 455                 460

Glu Lys Thr Pro Val Ser Asp Arg Val Thr Lys Cys Cys Thr Glu Ser
465                 470                 475                 480

Leu Val Asn Arg Arg Pro Cys Phe Ser Ala Leu Glu Val Asp Glu Thr
            485                 490                 495

Tyr Val Pro Lys Glu Phe Asn Ala Glu Thr Phe Thr Phe His Ala Asp
            500                 505                 510

Ile Cys Thr Leu Ser Glu Lys Glu Arg Gln Ile Lys Lys Gln Thr Ala
        515                 520                 525

Leu Val Glu Leu Val Lys His Lys Pro Lys Ala Thr Lys Glu Gln Leu
    530                 535                 540

Lys Ala Val Met Asp Asp Phe Ala Ala Phe Val Glu Lys Cys Cys Lys
545                 550                 555                 560

Ala Asp Asp Lys Glu Thr Cys Phe Ala Glu Glu Gly Lys Lys Leu Val
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Ala Ala Ser Gln Ala Ala Leu Gly Leu
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<210> 19
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9

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site in pPPC0006

<400> 19
gcctcgagaa aagagatgca cacaagagtg aggttgctca tcgatttaaa gatttgg   57

<210> 20
<211> 58
<212> DNA
<213> Artificial Sequence

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<223> primer used in generation XhoI and ClaI
site in pPPC0006

<400> 20
aatcgatgag caacctcact cttgtgtgca tctcttttct cgaggctcct ggaataag   58

<210> 21
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<212> DNA
<213> Artificial Sequence

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site in pPPC0006

<400> 21
tacaaactta agagtccaat tagc   24

<210> 22
<211> 29
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<213> Artificial Sequence

<220>
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site in pPPC0006

<400> 22
cacttctcta gagtggtttc atatgtctt   29

<210> 23
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<212> DNA
<213> Artificial Sequence

<220>
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<223> Synthetic oligonucleotide used to alter restriction

10

sites in pPPC0007

<400> 23
aagctgcctt aggcttataa taaggcgcgc cggccggccg tttaaactaa gcttaattct 60

<210> 24
<211> 60
<212> DNA
<213> Artificial Sequence

<220>
<221> Misc_Structure
<223> Synthetic oligonucleotide used to alter restriction
sites in pPPC0007

<400> 24
agaattaagc ttagtttaaa cggccggccg gcgcgcctta ttataagcct aaggcagctt 60

<210> 25
<211> 32
<212> DNA
<213> Artificial Sequence

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<223> forward primer useful for generation of albumin
fusion protein in which the albumin moiety is N-terminal
of the Therapeutic Protein

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<400> 25
aagctgcctt aggcttannn nnnnnnnnnn nn                                    32


<210> 26
<211> 51
<212> DNA
<213> Artificial Sequence

<220>
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<223> reverse primer useful for generation of albumin
fusion protein in which the albumin moiety is N-terminal
of the Therapeutic Protein
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<400> 26
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<210> 27
<211> 33
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<223> forward primer useful for generation of albumin fusion
protein in which the albumin moiety is c-terminal of the
Therapeutic Protein

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<400> 27
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<210> 28
<211> 52
<212> DNA
<213> Artificial Sequence

<220>
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<223> reverse primer useful for generation of albumin
fusion protein in which the albumin moiety is c-terminal of
the Therapeutic Protein
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<220>
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<400> 29
Met Lys Trp Val Ser Phe Ile Ser Leu Leu Phe Leu Phe Ser Ser Ala
 1               5                   10                  15
Tyr Ser Arg Ser Leu Asp Lys Arg
            20


<210> 30
<211> 114
<212> DNA
<213> Artificial Sequence

<220>
<221> primer_bind
<223> forward primer useful for generation of PC4:HSA
albumin fusion VECTOR

<220>
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<222> (5)..(10)
<223> BamHI retsriction site

<220>
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<222> (11)..(16)
<223> Hind III retsriction site

<220>
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<222> (17)..(27)
<223> Kozak sequence
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<220>
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<222> (25)..(97)
<223> cds natural signal sequence of human serum albumin

<220>
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<222> (75)..(81)
<223> XhoI restriction site

<220>
<221> misc_feature
<222> (98)..(114)
<223> cds first six amino acids of human serum albumin

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tcagggatcc aagcttccgc caccatgaag tgggtaacct ttatttccct tcttttttctc 60

tttagctcgg cttactcgag gggtgtgttt cgtcgagatg cacacaagag tgag   114

<210> 31
<211> 43
<212> DNA
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<220>
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PC4:HSA albumin fusion VECTOR

<220>
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<223> Asp718 restriction site

<220>
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<223> EcoRI restriction site

<220>
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<222> (15)..(17)
<223> reverse complement of stop codon

<220>
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<222> (18)..(25)
<223> AscI restriction site

<220>
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<222> (18)..(43)
<223> reverse complement of DNA sequence encoding last 9 amino acids

<400> 31
gcagcggtac cgaattcggc gcgccttata agcctaaggc agc   43

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<220>
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protein into pC4:HSA vector

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<221> Misc_Structure
<222> (44)
<223> n equals a, t, g, or c

<220>
<221> Misc_Structure
<222> (45)
<223> n equals a, t, g, or c

<220>
<221> Misc_Structure
<222> (46)
<223> n equals a, t, g, or c

<400> 32
ccgccgctcg aggggtgtgt ttcgtcgann nnnnnnnnnn nnnnnn                46


<210> 33
<211> 55
<212> DNA
<213> Artificial Sequence

<220>
<221> primer_bind
<223> reverse primer useful for inserting Therapeutic
protein into pC4:HSA vector

<220>
<221> Misc_Structure
<222> (38)
<223> n equals a, t, g, or c
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20

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<220>
<221> Misc_Structure
<222> (39)
<223> n equals a, t, g, or c

<220>
<221> Misc_Structure
<222> (40)
<223> n equals a, t, g, or c

<220>
<221> Misc_Structure
<222> (41)
<223> n equals a, t, g, or c

<220>
<221> Misc_Structure
<222> (42)
<223> n equals a, t, g, or c

<220>
<221> Misc_Structure
<222> (43)
<223> n equals a, t, g, or c

<220>
<221> Misc_Structure
<222> (44)
<223> n equals a, t, g, or c

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<222> (45)
<223> n equals a, t, g, or c

<220>
<221> Misc_Structure
<222> (46)
<223> n equals a, t, g, or c

<220>
<221> Misc_Structure
<222> (47)
<223> n equals a, t, g, or c

<220>
<221> Misc_Structure
<222> (48)
<223> n equals a, t, g, or c

<220>
<221> Misc_Structure
<222> (49)
<223> n equals a, t, g, or c

<220>
<221> Misc_Structure
<222> (50)
<223> n equals a, t, g, or c
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<220>
<221> Misc_Structure
<222> (51)
<223> n equals a, t, g, or c

<220>
<221> Misc_Structure
<222> (52)
<223> n equals a, t, g, or c

<220>
<221> Misc_Structure
<222> (53)
<223> n equals a, t, g, or c

<220>
<221> Misc_Structure
<222> (54)
<223> n equals a, t, g, or c

<220>
<221> Misc_Structure
<222> (55)
<223> n equals a, t, g, or c

<400> 33
agtcccatcg atgagcaacc tcactcttgt gtgcatcnnn nnnnnnnnn nnnnn          55


<210> 34
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<221> signal
<223> Stanniocalcin signal peptide

<400> 34
Met Leu Gln Asn Ser Ala Val Leu Leu Leu Leu Val Ile Ser Ala Ser
 1               5                  10                  15

Ala


<210> 35
<211> 22
<212> PRT
<213> Artificial Sequence

<220>
<221> signal
<223> Synthetic signal peptide

<400> 35
Met Pro Thr Trp Ala Trp Trp Leu Phe Leu Val Leu Leu Leu Ala Leu
 1               5                  10                  15

Trp Ala Pro Ala Arg Gly
            20
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22

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<210> 36
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<221>primer_bind
<223>Degenerate VH forward primer useful for
amplifying human VH domains

<400> 36
caggtgcagc tggtgcagtc tgg                                    23


<210> 37
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<221>primer_bind
<223>Degenerate VH forward primer useful for
amplifying human VH domains

<400> 37
caggtcaact taagggagtc tgg                                    23


<210> 38
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<221>primer_bind
<223>Degenerate VH forward primer useful for
amplifying human VH domains

<400> 38
gaggtgcagc tggtggagtc tgg                                    23


<210> 39
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<221>primer_bind
<223>Degenerate VH forward primer useful for
amplifying human VH domains

<400> 39
caggtgcagc tgcaggagtc ggg                                    23

<210> 40
<211> 23
<212> DNA
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<213> Artificial Sequence

<220>
<221>primer_bind
<223>Degenerate VH forward primer useful for
amplifying human VH domains

<400> 40
gaggtgcagc tgttgcagtc tgc   23

<210> 41
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<221>primer_bind
<223>Degenerate VH forward primer useful for
amplifying human VH domains

<400> 41
caggtacagc tgcagcagtc agg   23

<210> 42
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<221>primer_bind
<223>Degenerate JH reverse primer useful for
amplifying human VH domains

<400> 42
tgaggagacg gtgaccaggg tgcc   24

<210> 43
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<221>primer_bind
<223>Degenerate JH reverse primer useful for
amplifying human VH domains

<400> 43
tgaagagacg gtgaccattg tccc   24

<210> 44
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<221>primer_bind
<223>Degenerate JH reverse primer useful for
amplifying human VH domains

24

<400> 44
tgaggagacg gtgaccaggg ttcc   24

<210> 45
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<221>primer_bind
<223>Degenerate JH reverse primer useful for
amplifying human VH domains

<400> 45
tgaggagacg gtgaccgtgg tccc   24

<210> 46
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<221>primer_bind
<223>Degenerate Vkappa forward primer useful for
amplifying human VL domains

<400> 46
gacatccaga tgacccagtc tcc   23

<210> 47
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<221>primer_bind
<223>Degenerate Vkappa forward primer useful for
amplifying human VL domains

<400> 47
gatgttgtga tgactcagtc tcc   23

<210> 48
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<221>primer_bind
<223>Degenerate Vkappa forward primer useful for
amplifying human VL domains

<400> 48
gatattgtga tgactcagtc tcc   23

<210> 49
<211> 23
<212> DNA
<213> Artificial Sequence

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<220>
<221>primer_bind
<223>Degenerate Vkappa forward primer useful for
amplifying human VL domains

<400> 49
gaaattgtgt tgacgcagtc tcc                                    23


<210> 50
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<221>primer_bind
<223>Degenerate Vkappa forward primer useful for
amplifying human VL domains

<400> 50
gacatcgtga tgacccagtc tcc                                    23


<210> 51
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<221>primer_bind
<223>Degenerate Vkappa forward primer useful for
amplifying human VL domains

<400> 51
gaaacgacac tcacgcagtc tcc                                    23


<210> 52
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<221>primer_bind
<223>Degenerate Vkappa forward primer useful for
amplifying human VL domains

<400> 52
gaaattgtgc tgactcagtc tcc                                    23


<210> 53
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<221>primer_bind
<223>Degenerate Vlambda forward primer useful for
amplifying human VL domains

<400> 53
cagtctgtgt tgacgcagcc gcc                                    23
```

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<210> 54
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<221>primer_bind
<223>Degenerate Vlambda forward primer useful for
amplifying human VL domains

<400> 54
cagtctgccc tgactcagcc tgc                                    23

<210> 55
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<221>primer_bind
<223>Degenerate Vlambda forward primer useful for
amplifying human VL domains

<400> 55
tcctatgtgc tgactcagcc acc                                    23

<210> 56
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<221>primer_bind
<223>Degenerate Vlambda forward primer useful for
amplifying human VL domains

<400> 56
tcttctgagc tgactcagga ccc                                    23

<210> 57
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<221>primer_bind
<223>Degenerate Vlambda forward primer useful for
amplifying human VL domains

<400> 57
cacgttatac tgactcaacc gcc                                    23

<210> 58
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<221>primer_bind
<223>Degenerate Vlambda forward primer useful for
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amplifying human VL domains

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<400> 58
caggctgtgc tcactcagcc gtc                                         23

<210> 59
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<221>primer_bind
<223>Degenerate Vlambda forward primer useful for
amplifying human VL domains

<400> 59
aattttatgc tgactcagcc cca                                         23

<210> 60
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<221>primer_bind
<223>Degenerate Jkappa reverse primer useful for
amplifying human VL domains

<400> 60
acgtttgatt tccaccttgg tccc                                        24

<210> 61
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<221>primer_bind
<223>Degenerate Jkappa reverse primer useful for
amplifying human VL domains

<400> 61
acgtttgatc tccagcttgg tccc                                        24

<210> 62
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<221>primer_bind
<223>Degenerate Jkappa reverse primer useful for
amplifying human VL domains

<400> 62
acgtttgata tccactttgg tccc                                        24

<210> 63
<211> 24
<212> DNA
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<213> Artificial Sequence

<220>
<221>primer_bind
<223>Degenerate Jkappa reverse primer useful for
amplifying human VL domains

<400> 63
acgtttgatc tccaccttgg tccc   24

<210> 64
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<221>primer_bind
<223>Degenerate Jkappa reverse primer useful for
amplifying human VL domains

<400> 64
acgtttaatc tccagtcgtg tccc   24

<210> 65
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<221>primer_bind
<223>Degenerate Jlambda reverse primer useful for
amplifying human VL domains

<400> 65
cagtctgtgt tgacgcagcc gcc   23

<210> 66
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<221>primer_bind
<223>Degenerate Jlambda reverse primer useful for
amplifying human VL domains

<400> 66
cagtctgccc tgactcagcc tgc   23

<210> 67
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<221>primer_bind
<223>Degenerate Jlambda reverse primer useful for
amplifying human VL domains

<400> 67

tcctatgtgc tgactcagcc acc   23

<210> 68
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<221>primer_bind
<223>Degenerate Jlambda reverse primer useful for
amplifying human VL domains

<400> 68
tcttctgagc tgactcagga ccc   23

<210> 69
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<221>primer_bind
<223>Degenerate Jlambda reverse primer useful for
amplifying human VL domains

<400> 69
cacgttatac tgactcaacc gcc   23

<210> 70
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<221>primer_bind
<223>Degenerate Jlambda reverse primer useful for
amplifying human VL domains

<400> 70
caggctgtgc tcactcagcc gtc   23

<210> 71
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<221>primer_bind
<223>Degenerate Jlambda reverse primer useful for
amplifying human VL domains

<400> 71
aattttatgc tgactcagcc cca   23

<210> 72
<211> 15
<212> PRT
<213> Artificial Sequence

<220>

30

<221>turn
<223>Linker peptide that may be used to join VH
and VL domains in an scFv.

<400> 72
Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
 1   5   10   15

<210> 73
<211> 101
<212> PRT
<213> Homo sapiens

<400> 73
Pro Ala Leu Phe Ile Cys Val Ile Ile Phe Val Asn Ile Val Phe Ser
 1   5   10   15

Val Val Ala Thr Ser Ser Pro Pro Ala Ser Gly Ser Val Cys Leu Pro
            20   25   30

Gly Leu Leu Ala Pro His Trp Ala Ala Pro Gly Ser Leu Pro Leu Ile
        35   40   45

Pro Gly Leu Ala Val Arg Pro Ser Gln Gln Gly Pro Val Thr Gln Gln
    50   55   60

Pro Ala Gln Ser Ile Cys Phe Trp Gly Met Gly Trp Gly Leu Leu His
65   70   75   80

Arg Arg Phe Glu Pro Ser Thr Leu Gly Lys Gly Thr Leu His Asp Thr
                85   90   95

Pro Leu Pro Pro Ser
            100

<210> 74
<211> 58
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (24)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 74
Arg Pro Ser Leu Pro Lys Cys Ala Ala Leu Val His Val Pro Asn Gly
 1   5   10   15

Pro Ser Pro His Ala Pro Pro Xaa Ser Gly Val Gly Ala Pro Ser Glu
            20   25   30

Val Ser Glu Ser Leu Lys Cys Ser Phe Val Arg Pro Leu Cys Ser Asp
        35   40   45

Ser Pro Gly Gln Ala Thr Ser Asn Pro Leu

     50   55

<210> 75
<211> 119
<212> PRT
<213> Homo sapiens

<400> 75
Asp Leu Asp Leu Met Glu Ser Gly Val Ser Thr His Asn Met Ser Ser
 1   5   10   15

Trp Thr Leu Gly Ile His Cys Glu Gln Ala Gly Trp Gly Leu Pro Ala
            20   25   30

Gln Ile Gly Ala Ile Leu Phe Cys Ile Leu Phe Gln Gly Val Leu Asn
        35   40   45

Thr Leu Lys Gln Val Glu Ala Pro Ala Pro Asp Trp Glu Leu Leu Glu
    50   55   60

Arg Pro Pro Cys Val Cys Val Val Leu Ser Trp Ser His Ile Glu Ser
65   70   75   80

Gly Trp Gly Ser Ser Thr Arg Gln Ser Pro Ser Asn Ser Gln Val Leu
                85   90   95

Ala Pro Ser Gly Lys Ala Asp Thr Leu Ser Trp Arg Arg Pro Arg Lys
                100   105   110

Ser Gly Leu Arg Val Ala Ala
        115

<210> 76
<211> 90
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (5)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 76
Val Thr Cys Gln Xaa Val Leu Pro Ser Pro Val Tyr Leu Cys Asn Tyr
 1   5   10   15

Phe Cys Lys His Cys Ile Leu Cys Gly Arg His Leu Leu Ala Pro Ser
            20   25   30

Leu Gly Phe Ser Leu Ser Ser Arg Pro Ala Cys Thr Ser Leu Gly Cys
        35   40   45

Ser Gly Val Ser Ala Pro His Ser Arg Pro Gly Cys Gln Ala Gln Pro
    50   55   60

Ala Gly Ala Arg Asp Pro Ala Ala Cys Pro Lys His Leu Phe Leu Gly

                65   70   75   80

Asp Gly Val Gly Ala Ala Pro Gln Glu Val
                    85   90

<210> 77
<211> 70
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (29)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (34)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (37)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 77
Met Asp Pro Ala Ala Val Ala Leu Leu Ala Leu Ser Leu Pro Cys Ala
  1   5   10   15

Leu Val Gly Val Gln Trp Glu Gln Ala Pro Trp Gly Xaa Trp Arg Leu
                20   25   30

Ser Xaa Ser Ala Xaa Thr Pro Glu Thr Pro Ser Trp Arg Leu Cys Pro
        35   40   45

Leu Arg Asp Tyr Pro Lys Pro Gly Gln Arg Ser Gly Gly Asp Arg Gly
      50   55   60

Ser His Ile Arg Ser Leu
 65   70

<210> 78
<211> 194
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (17)
<223> Xaa equals any of the naturally occurring L-amino acids

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<220>
<221> SITE
<222> (33)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 78
Gln Trp Xaa Gly Gln Gly Ser Leu Cys Pro Trp Tyr Cys Cys Pro Gly
 1               5                  10                  15

Xaa Val Ser Ala Val Thr Leu Leu Pro Ser Trp Trp Leu Leu Arg Pro
            20                  25                  30

Xaa Phe Val Leu Leu Phe Leu Pro Lys Cys Leu Ser Ser Pro Ser Cys
        35                  40                  45

Ile Lys Tyr Pro Cys Cys Ala Thr Asn Tyr Leu Glu Leu Gly Asp Phe
    50                  55                  60

Thr Thr Thr Ala Cys Gln Arg Pro Ala Val Asp Glu Gly Leu Gly Gly
 65                  70                  75                  80

Met Ala Gly Pro Ala Gln Gly Ser Leu Ala Glu Val Gly Ala Glu Ala
                85                  90                  95

Ala Arg His Trp Arg Leu Gly Leu Ser His Thr Pro Trp Leu Leu Gly
                100                 105                 110

Gly Cys Ile Leu Leu Ser Ser Leu Ser Ser Arg Gly Cys Thr Leu Gly
            115                 120                 125

Cys Arg Pro Pro Val Ser Leu Thr Gly Tyr Ser Trp Gly Ser Leu Arg
    130                 135                 140

Ser Trp Arg Cys Pro Gln Pro Pro Ser Pro Arg Leu Pro Pro Pro His
145                 150                 155                 160

Thr Leu Arg Pro Gln Arg Phe Val Arg Val His Glu Ile Leu Glu Leu
                165                 170                 175

Pro Gly Cys Ser Phe Cys Asn Ile Phe Asn Ile Cys Asn Pro Val Lys
                180                 185                 190

Tyr Gln


<210> 79
<211> 103
<212> PRT
<213> Homo sapiens

<400> 79
Met Asp Pro Ala Ala Val Ala Leu Leu Ala Leu Ser Leu Pro Cys Ala
 1               5                  10                  15

Leu Val Gly Val Gln Trp Glu Gln Ala Pro Trp Gly Pro Trp Arg Leu
            20                  25                  30

Ser Leu Leu Ser Pro His Pro Arg Asp Pro Ile Val Ala Pro Val Ser
```

               35   40   45

Thr Gln Gly Leu Ser Gln Ala Trp Pro Glu Val Gly Arg Gly Gln Arg
        50   55   60

Glu Pro His Arg Ser Leu Tyr Gln Pro Leu Ser Tyr His Arg Val Gly
65   70   75   80

Ala Leu Pro Ser His Arg Val Ser Gly Leu Trp Ala Pro Pro Ser Cys
            85   90   95

Thr Gly Pro Arg Gly His Phe
            100

<210> 80
<211> 477
<212> PRT
<213> Homo sapiens

<400> 80
Met Ala Ala Pro Thr Pro Ala Arg Pro Val Leu Thr His Leu Leu Val
    1   5   10   15

Ala Leu Phe Gly Met Gly Ser Trp Ala Ala Val Asn Gly Ile Trp Val
            20   25   30

Glu Leu Pro Val Val Val Lys Glu Leu Pro Glu Gly Trp Ser Leu Pro
        35   40   45

Ser Tyr Val Ser Val Leu Val Ala Leu Gly Asn Leu Gly Leu Leu Val
    50   55   60

Val Thr Leu Trp Arg Arg Leu Ala Pro Gly Lys Asp Glu Gln Val Pro
65   70   75   80

Ile Arg Val Val Gln Val Leu Gly Met Val Gly Thr Ala Leu Leu Ala
            85   90   95

Ser Leu Trp His His Val Ala Pro Val Ala Gly Gln Leu His Ser Val
            100   105   110

Ala Phe Leu Ala Leu Ala Phe Val Leu Ala Leu Ala Cys Cys Ala Ser
        115   120   125

Asn Val Thr Phe Leu Pro Phe Leu Ser His Leu Pro Pro Arg Phe Leu
    130   135   140

Arg Ser Phe Phe Leu Gly Gln Gly Leu Ser Ala Leu Leu Pro Cys Val
145   150   155   160

Leu Ala Leu Val Gln Gly Val Gly Arg Leu Glu Cys Pro Pro Ala Pro
            165   170   175

Ile Asn Gly Thr Pro Gly Pro Pro Leu Asp Phe Leu Glu Arg Phe Pro
            180   185   190

Ala Ser Thr Phe Phe Trp Ala Leu Thr Ala Leu Leu Val Ala Ser Ala
        195   200   205

                              35

Ala Ala Phe Gln Gly Leu Leu Leu Leu Leu Pro Pro Pro Pro Ser Val
    210   215   .   220

Pro Thr Gly Glu Leu Gly Ser Gly Leu Gln Val Gly Ala Pro Gly Ala
225   230   235   240

Glu Glu Glu Val Glu Glu Ser Ser Pro Leu Gln Glu Pro Pro Ser Gln
             245   250   255

Ala Ala Gly Thr Thr Pro Gly Pro Asp Pro Lys Ala Tyr Gln Leu Leu
             260   265   270

Ser Ala Arg Ser Ala Cys Leu Leu Gly Leu Leu Ala Ala Thr Asn Ala
        275   280   285

Leu Thr Asn Gly Val Leu Pro Ala Val Gln Ser Phe Ser Cys Leu Pro
    290   295   300

Tyr Gly Arg Leu Ala Tyr His Leu Ala Val Val Leu Gly Ser Ala Ala
305   310   315   320

Asn Pro Leu Ala Cys Phe Leu Ala Met Gly Val Leu Cys Arg Tyr Thr
             325   330   335

Arg Thr Pro Ser Pro Cys Ala Gly Gly Thr Gln Gly Trp Glu Pro Gly
        340   345   350

Pro Gly Ala Val Ser Pro Asp Ile Leu Leu Ala His Cys Arg Ser Leu
        355   360   365

Ala Gly Leu Gly Gly Leu Ser Leu Leu Gly Val Phe Cys Gly Gly Tyr
    370   375   380

Leu Met Ala Leu Ala Val Leu Ser Pro Cys Pro Pro Leu Val Gly Thr
385   390   395   400

Ser Ala Gly Val Val Leu Val Val Leu Ser Trp Val Leu Cys Leu Gly
             405   410   415

Val Phe Ser Tyr Val Lys Val Ala Ala Ser Ser Leu Leu His Gly Gly
             420   425   430

Gly Arg Pro Ala Leu Leu Ala Ala Gly Val Ala Ile Gln Val Gly Ser
        435   440   445

Leu Leu Gly Ala Val Ala Met Phe Pro Pro Thr Ser Ile Tyr His Val
    450   455   460

Phe His Ser Arg Lys Asp Cys Ala Asp Pro Cys Asp Ser Ser
465   470   475

<210> 81
<211> 445
<212> PRT
<213> Homo sapiens

<400> 81

36

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Met Ala Ala Pro Thr Pro Ala Arg Pro Val Leu Thr His Leu Leu Val
 1               5                   10              15

Ala Leu Phe Gly Met Gly Ser Trp Ala Ala Val Asn Gly Ile Trp Val
             20              25                  30

Glu Leu Pro Val Val Val Lys Glu Leu Pro Glu Gly Trp Ser Leu Pro
             35              40                  45

Ser Tyr Val Ser Val Leu Val Ala Leu Gly Asn Leu Gly Leu Leu Val
         50              55                  60

Val Thr Leu Trp Arg Arg Leu Ala Pro Gly Lys Asp Glu Gln Val Pro
 65              70                  75                  80

Ile Arg Val Val Gln Val Leu Gly Met Val Gly Thr Ala Leu Leu Ala
                 85              90                  95

Ser Leu Trp His His Val Ala Pro Val Ala Gly Gln Leu His Ser Val
             100             105                 110

Ala Phe Leu Ala Leu Ala Phe Val Leu Ala Leu Ala Cys Cys Ala Pro
         115             120                 125

Asn Val Thr Phe Leu Pro Phe Leu Ser His Leu Pro Pro Arg Phe Leu
     130             135                 140

Arg Ser Phe Phe Leu Gly Gln Gly Leu Ser Ala Leu Leu Pro Cys Val
145             150             155                 160

Leu Ala Leu Val Gln Gly Val Gly Arg Leu Glu Cys Pro Pro Ala Pro
             165             170                 175

Ile Asn Gly Thr Pro Gly Pro Pro Leu Asp Phe Leu Glu Arg Phe Pro
             180             185             190

Ala Ser Thr Phe Phe Trp Ala Leu Thr Ala Leu Leu Val Ala Ser Ala
         195             200             205

Ala Ala Phe Gln Gly Leu Leu Leu Leu Leu Pro Pro Pro Pro Ser Val
     210             215                 220

Pro Thr Gly Glu Leu Gly Ser Gly Leu Gln Val Gly Ala Pro Gly Ala
225                 230                 235                 240

Glu Glu Glu Val Glu Glu Ser Ser Pro Leu Gln Glu Pro Pro Ser Gln
             245                 250                 255

Ala Ala Gly Thr Thr Pro Gly Pro Asp Pro Lys Ala Tyr Gln Leu Leu
             260                 265                 270

Ser Ala Arg Ser Ala Cys Leu Leu Gly Leu Leu Ala Ala Thr Asn Ala
         275             280                 285

Leu Thr Asn Gly Val Leu Pro Ala Val Gln Ser Phe Ser Cys Leu Pro
     290             295                 300

Tyr Gly Arg Leu Ala Tyr His Leu Ala Val Val Leu Gly Ser Ala Ala
305                 310                 315                 320
```

37

```
Asn Pro Leu Ala Cys Phe Leu Ala Met Gly Val Leu Cys Arg Ser Leu
            325              330              335

Ala Gly Leu Gly Gly Leu Ser Leu Leu Gly Val Phe Cys Gly Gly Tyr
        340              345              350

Leu Met Ala Leu Ala Val Leu Ser Pro Cys Pro Pro Leu Val Gly Thr
    355              360              365

Ser Ala Gly Val Val Leu Val Val Leu Ser Trp Val Leu Cys Leu Gly
    370              375              380

Val Phe Ser Tyr Val Lys Val Ala Ala Ser Ser Leu Leu His Gly Gly
385              390              395              400

Gly Arg Pro Ala Leu Leu Ala Ala Gly Val Ala Ile Gln Val Gly Ser
            405              410              415

Leu Leu Gly Ala Val Ala Met Phe Pro Pro Thr Ser Ile Tyr His Val
        420              425              430

Phe His Ser Arg Lys Asp Cys Ala Asp Pro Cys Asp Ser
        435              440              445
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<210> 82
<211> 264
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (196)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (224)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (233)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 82
```

```
Met Leu Arg Leu Phe Glu Thr Phe Leu Glu Thr Ala Pro Gln Leu Thr
1             5              10              15

Leu Val Leu Ala Ile Met Leu Gln Ser Gly Arg Ala Glu Tyr Tyr Gln
        20              25              30

Trp Val Gly Ile Cys Thr Ser Phe Leu Gly Ile Ser Trp Ala Leu Leu
        35              40              45

Asp Tyr His Arg Ala Leu Arg Thr Cys Leu Pro Ser Lys Pro Leu Leu
    50              55              60

Gly Leu Gly Ser Ser Val Ile Tyr Phe Leu Trp Asn Leu Leu Leu Leu
```

```
        65                    70                    75                  , 80

    Trp Pro Arg Val Leu Ala Val Ala Leu Phe Ser Ala Leu Phe Pro Ser
                    85                    90                   95

    Tyr Val Ala Leu His Phe Leu Gly Leu Trp Leu Val Leu Leu Leu Trp
                    100                  105                  110

    Val Trp Leu Gln Gly Thr Asp Phe Met Pro Asp Pro Ser Ser Glu Trp
            115                     120                  125

    Leu Tyr Arg Val Thr Val Ala Thr Ile Leu Tyr Phe Ser Trp Phe Asn
        130                     135                  140

    Val Ala Glu Gly Arg Thr Arg Gly Arg Ala Ile Ile His Phe Ala Phe
    145                     150                  155                  160

    Leu Leu Ser Asp Ser Ile Leu Leu Val Ala Thr Trp Val Thr His Ser
                    165                    170                  175

    Ser Trp Leu Pro Ser Gly Ile Pro Leu Gln Leu Trp Leu Pro Val Gly
                    180                    185                  190

    Cys Gly Cys Xaa Phe Leu Gly Leu Ala Leu Arg Leu Val Tyr Tyr His
                    195                    200                  205

    Trp Leu His Pro Ser Cys Cys Trp Lys Pro Asp Pro Asp Gln Val Xaa
            210                     215                  220

    Gly Ala Arg Ser Leu Leu Ser Pro Xaa Gly Tyr Gln Leu Pro Gln Asn
    225                     230                  235                  240

    Arg Arg Met Thr His Leu Ala Gln Lys Phe Phe Pro Lys Ala Lys Asp
                    245                     250                  255

    Glu Ala Ala Ser Pro Val Lys Gly
                    260
```

<210> 83
<211> 115
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (60)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (73)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (75)
<223> Xaa equals any of the naturally occurring L-amino acids

```
<220>
<221> SITE
<222> (82)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 83
Leu Pro Tyr Pro Gly Leu Gly Gly His Arg Gly Cys Pro Leu Glu Phe
 1           5              10            Cys        15

Phe Leu Pro Ser Pro Thr Pro Phe Ile Gln Phe Met Lys Gln Ile Phe
            20              25              30

Ala Lys Ser Ser Leu Cys Ala Arg Asn Ile Ile Leu Ser Leu Gln Pro
         35          40              45

Gly Thr Arg Pro Ala Thr Ser Leu Ala Ser Ser Xaa Thr Cys Thr Asn
      50              55              60

Gln Ser Arg Val Arg Ser Gln Met Xaa Glu Xaa Arg Asp Ala Gln Leu
 65          70              75              80

Trp Xaa Ala Pro Val Arg Thr Ser Gly Ile Ser Val Lys Leu Ala Trp
            85              90              95

Pro Leu Leu Leu Leu Ser Arg Gly Cys Phe Ser Thr Lys Ser Leu Val
            100             105             110

Ser Leu Val
      115


<210> 84
<211> 264
<212> PRT
<213> Homo sapiens

<400> 84
Met Leu Arg Leu Phe Glu Thr Phe Leu Glu Thr Ala Pro Gln Leu Thr
 1           5              10              15

Leu Val Leu Ala Ile Met Leu Gln Ser Gly Arg Ala Glu Tyr Tyr Gln
            20              25              30

Trp Val Gly Ile Cys Thr Ser Phe Leu Gly Ile Ser Trp Ala Leu Leu
         35              40              45

Asp Tyr His Arg Ala Leu Arg Thr Cys Leu Pro Ser Lys Pro Leu Leu
      50              55              60

Gly Leu Gly Ser Ser Val Ile Tyr Phe Leu Trp Asn Leu Leu Leu Leu
 65              70              75              80

Trp Pro Arg Val Leu Ala Val Ala Leu Phe Ser Ala Leu Phe Pro Ser
            85              90              95

Tyr Val Ala Leu His Phe Leu Gly Leu Trp Leu Val Leu Leu Leu Trp
            100             105             110

Val Trp Leu Gln Gly Thr Asp Phe Met Pro Asp Pro Ser Ser Glu Trp
```

40

```
          115                      120                      125
Leu Tyr Arg Val Thr Val Ala Thr Ile Leu Tyr Phe Ser Trp Phe Asn
    130                      135                      140

Val Ala Glu Gly Arg Thr Arg Gly Arg Ala Ile Ile His Phe Ala Phe
145                      150                      155                      160

Leu Leu Ser Asp Ser Ile Leu Leu Val Ala Thr Trp Val Thr His Ser
                165                      170                      175

Ser Trp Leu Pro Ser Gly Ile Pro Leu Gln Leu Trp Leu Pro Val Gly
                180                      185                      190

Cys Gly Cys Phe Phe Leu Gly Leu Ala Leu Arg Leu Val Tyr Tyr His
            195                      200                      205

Trp Leu His Pro Ser Cys Cys Trp Lys Pro Asp Pro Asp Gln Val Asp
    210                      215                      220

Gly Ala Arg Ser Leu Leu Ser Pro Glu Gly Tyr Gln Leu Pro Gln Asn
225                      230                      235                      240

Arg Arg Met Thr His Leu Ala Gln Lys Phe Phe Pro Lys Ala Lys Asp
                245                      250                      255

Glu Ala Ala Ser Pro Val Lys Gly
                260
```

```
<210> 85
<211> 57
<212> PRT
<213> Homo sapiens

<400> 85
Met Asn Val Phe Leu Ser Leu Pro Leu Gly Ser Ser Leu Pro Pro Leu
    1               5                      10                      15

Leu Phe Pro Pro Ser Leu Pro Ser Leu Phe Phe Pro Leu Pro Leu Tyr
                20                      25                      30

Leu Ser Phe Ser Ala Pro Ser Pro Ala Thr Thr Pro Gly Phe Ile Ser
            35                      40                      45

Leu Pro Gly His Ile Pro Ser Ser Ser
    50                      55
```

```
<210> 86
<211> 49
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (26)
<223> Xaa equals any of the naturally occurring L-amino acids
```

<400> 86
Cys His Pro Gln Gln Pro Ser Cys Arg Ile Pro Leu Phe Val Leu Phe
 1   5   10   15

Ile Ser Gln Thr Ser Gln His Leu Gly Xaa Ile Glu Gly Ala Tyr Val
            20   25   30

Glu Ile Leu Gly Ala Gly Ser Pro Asn Thr Ser Glu Thr Ile Pro Asn
        35   40   45

Asn

<210> 87
<211> 52
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (50)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 87
Lys Glu Pro Thr Leu Lys Tyr Trp Gly Arg Val Pro Pro Ile Leu Leu
 1   5   10   15

Lys Leu Phe Gln Thr Ile Glu Lys Glu Gly His Leu Pro Asn Ser Phe
            20   25   30

Tyr Glu Ala Ser Ile Ile Leu Ile Leu Lys Pro Gly Arg Asp Thr Ala
        35   40   45

Lys Xaa Lys Lys
        50

<210> 88
<211> 155
<212> PRT
<213> Homo sapiens

<400> 88
Met Phe Phe Phe Leu Phe Pro Trp Val Leu Leu Ser Leu Pro Ser Ser
 1   5   10   15

Ser Leu Pro Leu Ser Leu Leu Tyr Ser Ser Leu Ser Leu Ser Ile Cys
            20   25   30

Pro Ser Leu Leu Gln Val Leu Pro Gln Pro Gln Asp Ser Ser Ala Ser
        35   40   45

Leu Asp Thr Ser His Pro Ala Pro Asp Arg Ser Pro Pro Ser Leu Leu
    50   55   60

Ile Leu Arg Ala Leu Ser Ser Ile Cys Leu Ser Pro Cys Gln Arg Pro

                                      42

```
      65                    70                    75                    80

Cys Cys Ala Pro Gly Gly Ala Thr His Leu Pro Gly Asn Ser Thr Phe
                85                    90                    95

Ser His Ala Pro Asp Cys Ser Leu His Ser Ser Arg Leu Ala Gln Ser
            100                   105                   110

Pro Val Thr His Cys Ser Ser Gly Ser Leu Gly Leu Ser Ala His Gly
        115                   120                   125

His Leu His Ala His Pro Ser Ile Ser Val Ser Pro His Leu Ser Leu
    130                   135                     140

Ser Ile Ser Asn Pro Cys Ser Ser Thr Lys His
145                   150                   155
```

<210> 89
<211> 91
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (41)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 89
```
Val Trp Arg Arg Cys Val Ser Trp Arg Ser Ile Arg Ala Gln Val Thr
  1               5                  10                   15

Phe Pro Glu Asp Phe Leu Ser Leu Ser Ser Ser Val Gln Phe Gln Val
            20                    25                    30

Ile His Val Leu Leu Asp Pro Gly Xaa Thr Gly Ile Ser Thr Asp Leu
        35                    40                    45

Leu Ala Ser Phe Gly Leu Glu Tyr His Ser Trp Leu Gly Ala Glu Ala
    50                    55                    60

Ala Gly Leu Ile Val Ile Tyr His Lys Val Ala Arg Lys Leu Pro Arg
65                    70                    75                    80

Gly Val Arg Lys Ala Ala Gly Gly Gly Arg Val
                85                    90
```

<210> 90
<211> 21
<212> PRT
<213> Homo sapiens

<400> 90
```
Asp Leu His Ile Lys Leu Leu Glu His Tyr Cys Leu Thr Ser Cys Lys
  1               5                  10                   15

Lys Val Leu Gln Leu
```

43

20

<210> 91
<211> 67
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (13)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 91
Pro Gln Ser Pro Gln Arg Gly Cys Tyr Ser Met Leu Xaa Val Leu Ser
  1   5   10   15

Val Ser His Pro Gln Pro Asn Lys Trp Arg Cys Val Val Pro Arg Gly
            20   25   30

Pro Phe Ser His Cys Leu Ala Ser Arg Arg Gly Val Leu Gln Gly Tyr
          35   40   45

Ser Phe Val Cys Thr Cys Arg Leu Val Gly Pro Glu Phe Phe Ser His
        50   55   60

Val Gln Glu
 65

<210> 92
<211> 21
<212> PRT
<213> Homo sapiens

<400> 92
Asp Leu His Ile Lys Leu Leu Glu His Tyr Cys Leu Thr Ser Cys Lys
  1   5   10   15

Lys Val Leu Gln Leu
            20

<210> 93
<211> 67
<212> PRT
<213> Homo sapiens

<400> 93
Asp Gly Ala Pro Gly Pro Arg Val Gly His Gly His Pro Gly Trp Leu
  1   5   10   15

Gly Arg Arg Arg Gln Ala Leu His Val Leu Gln Leu Gly Met Trp Val
            20   25   30

Arg Glu Gly Ile Trp Phe Cys Tyr Leu Ala Val Val Phe Ser His Pro
          35   40   45

44

```
Ser Phe Leu Thr Ile Lys Ser His Leu Gly Leu Glu Lys Lys Lys Lys
     50                55                60

Lys Thr Arg
 65



<210> 94
<211> 44
<212> PRT
<213> Homo sapiens

<400> 94
Met Leu Ser Ser Ile Leu Ser Gln Leu Met Val Ser Lys Pro Trp Gly
 1                5                10                15

Val Phe Ile Ser Phe Ser Phe Ile Ser Leu Ser Phe Tyr His Ala Ile
                20                25                30

Ser Ile Ser Ser Val Pro Ser Gly Arg Gln Val Val
             35                40



<210> 95
<211> 150
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (12)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (38)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (43)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (145)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 95
Cys Pro Pro Pro Lys Arg Gly Gly Ile Glu Xaa Glu Leu Gly Lys
 1                5                10                15

Leu Trp Pro Thr Phe Glu Thr Phe Arg Ala Asn Arg Arg Thr Met Leu
                20                25                30

Leu Glu Pro Leu Gly Xaa Pro Gly Gly Gly Xaa Arg Pro Phe Trp Lys
             35                40                45
```

45

Arg Ala Arg Gly Val Thr Ser Glu Ala Ile Val Thr Gly Arg Cys Asn
    50   55   60

His Cys Pro Asp Cys Gly Lys Ala Trp Arg Glu Gln Gly Glu Ser Thr
65   70   75   80

Pro Ser Thr Cys Pro Phe Asp Pro Leu Thr Cys Trp Trp Leu Ala Leu
                85   90   95

Ala Lys Pro Glu Thr Gly Gly Gln Glu Pro Leu Ser Val Ala Ala Tyr
            100   105   110

Gly Gly Gln Pro Ser Glu Val Lys Ala Gly Gln Lys Val Glu Lys Gly
        115   120   125

Leu Gly Gly Thr His Gly Glu Gln Ser Thr Lys Phe Thr Pro Phe Val
    130   135   140

Xaa Trp His Trp Lys Ile
145   150

<210> 96
<211> 35
<212> PRT
<213> Homo sapiens

<400> 96
Met Val Ser Lys Pro Trp Gly Val Phe Ile Ser Phe Ser Phe Ile Ser
1   5   10   15

Leu Ser Phe Tyr His Ala Ile Ser Ile Ser Ser Val Pro Ser Gly Arg
            20   25   30

Gln Val Val
        35

<210> 97
<211> 13
<212> PRT
<213> Homo sapiens

<400> 97
Met Lys Ser Leu His Gly Arg Leu Leu Trp Gln Ser Ala
1   5   10

<210> 98
<211> 13
<212> PRT
<213> Homo sapiens

<400> 98
Met Lys Ser Leu His Gly Arg Leu Leu Trp Gln Ser Ala
1   5   10

<210> 99
<211> 353
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (260)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 99

```
Met Pro Trp Pro Leu Leu Leu Leu Ala Val Ser Gly Ala Gln Thr
 1               5                  10                  15

Thr Arg Pro Cys Phe Pro Gly Cys Gln Cys Glu Val Glu Thr Phe Gly
            20                  25                  30

Leu Phe Asp Ser Phe Ser Leu Thr Arg Val Asp Cys Ser Gly Leu Gly
        35                  40                  45

Pro His Ile Met Pro Val Pro Ile Pro Leu Asp Thr Ala His Leu Asp
    50                  55                  60

Leu Ser Ser Asn Arg Leu Glu Met Val Asn Glu Ser Val Leu Ala Gly
65                  70                  75                  80

Pro Gly Tyr Thr Thr Leu Ala Gly Leu Asp Leu Ser His Asn Leu Leu
            85                  90                      95

Thr Ser Ile Ser Pro Thr Ala Phe Ser Arg Leu Arg Tyr Leu Glu Ser
            100                 105                 110

Leu Asp Leu Ser His Asn Gly Leu Thr Ala Leu Pro Ala Glu Ser Phe
        115                 120                 125

Thr Ser Ser Pro Leu Ser Asp Val Asn Leu Ser His Asn Gln Leu Arg
    130                 135                 140

Glu Val Ser Val Ser Ala Phe Thr Thr His Ser Gln Gly Arg Ala Leu
145                 150                 155                 160

His Val Asp Leu Ser His Asn Leu Ile His Arg Leu Val Pro His Pro
                165                 170                 175

Thr Arg Ala Gly Leu Pro Ala Pro Thr Ile Gln Ser Leu Asn Leu Ala
            180                 185                 190

Trp Asn Arg Leu His Ala Val Pro Asn Leu Arg Asp Leu Pro Leu Arg
        195                 200                 205

Tyr Leu Ser Leu Asp Gly Asn Pro Leu Ala Val Ile Gly Pro Gly Ala
    210                 215                 220

Phe Ala Gly Leu Gly Gly Leu Thr His Leu Ser Leu Ala Ser Leu Gln
225                 230                 235                 240

Arg Leu Pro Glu Leu Ala Pro Ser Gly Phe Arg Glu Leu Pro Gly Leu
```

                        245   250   255

    Gln Val Leu Xaa Leu Ser Gly Asn Pro Lys Leu Asn Trp Ala Gly Ala
                260   265   270

    Glu Val Phe Ser Gly Leu Ser Ser Leu Gln Glu Leu Asp Leu Ser Gly
                275   280   285

    Thr Asn Leu Val Pro Leu Pro Glu Ala Leu Leu Leu His Leu Pro Ala
        290   295   300

    Leu Gln Ser Val Ser Val Gly Gln Asp Val Arg Cys Arg Arg Leu Val
    305   310   315   320

    Arg Glu Gly Thr Tyr Pro Arg Arg Pro Gly Ser Ser Pro Lys Val Ala
                    325   330   335

    Leu His Cys Val Asp Thr Arg Glu Ser Ala Ala Arg Gly Pro Thr Ile
                340   345   350

    Leu

<210> 100
<211> 353
<212> PRT
<213> Homo sapiens

<400> 100
    Met Pro Trp Pro Leu Leu Leu Leu Ala Val Ser Gly Ala Gln Thr
    1   5   10   15

    Thr Arg Pro Cys Phe Pro Gly Cys Gln Cys Glu Val Glu Thr Phe Gly
                20   25   30

    Leu Phe Asp Ser Phe Ser Leu Thr Arg Val Asp Cys Ser Gly Leu Gly
            35   40   45

    Pro His Ile Met Pro Val Pro Ile Pro Leu Asp Thr Ala His Leu Asp
        50   55   60

    Leu Ser Ser Asn Arg Leu Glu Met Val Asn Glu Ser Val Leu Ala Gly
    65   70   75   80

    Pro Gly Tyr Thr Thr Leu Ala Gly Leu Asp Leu Ser His Asn Leu Leu
                    85   90   95

    Thr Ser Ile Ser Pro Thr Ala Phe Ser Arg Leu Arg Tyr Leu Glu Ser
                100   105   110

    Leu Asp Leu Ser His Asn Gly Leu Thr Ala Leu Pro Ala Glu Ser Phe
            115   120   125

    Thr Ser Ser Pro Leu Ser Asp Val Asn Leu Ser His Asn Gln Leu Arg
        130   135   140

    Glu Val Ser Val Ser Ala Phe Thr Thr His Ser Gln Gly Arg Ala Leu
    145   150   155   160

                                48

```
His Val Asp Leu Ser His Asn Leu Ile His Arg Leu Val Pro His Pro
                165                 170                 175

Thr Arg Ala Gly Leu Pro Ala Pro Thr Ile Gln Ser Leu Asn Leu Ala
            180                 185                 190

Trp Asn Arg Leu His Ala Val Pro Asn Leu Arg Asp Leu Pro Leu Arg
        195                 200                 205

Tyr Leu Ser Leu Asp Gly Asn Pro Leu Ala Val Ile Gly Pro Gly Ala
    210                 215                 220

Phe Ala Gly Leu Gly Gly Leu Thr His Leu Ser Leu Ala Ser Leu Gln
225                 230                 235                 240

Arg Leu Pro Glu Leu Ala Pro Ser Gly Phe Arg Glu Leu Pro Gly Leu
            245                 250                 255

Gln Val Leu Asp Leu Ser Gly Asn Pro Lys Leu Asn Trp Ala Gly Ala
            260                 265                 270

Glu Val Phe Ser Gly Leu Ser Ser Leu Gln Glu Leu Asp Leu Ser Gly
        275                 280                 285

Thr Asn Leu Val Pro Leu Pro Glu Ala Leu Leu Leu His Leu Pro Ala
    290                 295                 300

Leu Gln Ser Val Ser Val Gly Gln Asp Val Arg Cys Arg Arg Leu Val
305                 310                 315                 320

Arg Glu Gly Thr Tyr Pro Arg Arg Pro Gly Ser Ser Pro Lys Val Ala
            325                 330                 335

Leu His Cys Val Asp Thr Arg Glu Ser Ala Ala Arg Gly Pro Thr Ile
            340                 345                 350

Leu
```

```
<210> 101
<211> 285
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (259)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (262)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (280)
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<223> Xaa equals any of the naturally occurring L-amino acids

<400> 101

```
Met Gly Phe Leu Gln Leu Leu Val Val Ala Val Leu Ala Ser Glu His
 1               5                  10                  15

Arg Val Ala Gly Ala Ala Glu Val Phe Gly Asn Ser Ser Glu Gly Leu
            20                  25                  30

Ile Glu Phe Ser Val Gly Lys Phe Arg Tyr Phe Glu Leu Asn Arg Pro
        35                  40                  45

Phe Pro Glu Glu Ala Ile Leu His Asp Ile Ser Ser Asn Val Thr Phe
    50                  55                  60

Leu Ile Phe Gln Ile His Ser Gln Tyr Gln Asn Thr Thr Val Ser Phe
65                  70                  75                  80

Ser Pro Thr Leu Leu Ser Asn Ser Ser Glu Thr Gly Thr Ala Ser Gly
            85                  90                  95

Leu Val Phe Ile Leu Arg Pro Glu Gln Ser Thr Cys Thr Trp Tyr Leu
        100                 105                 110

Gly Thr Ser Gly Ile Gln Pro Val Gln Asn Met Ala Ile Leu Leu Ser
        115                 120                 125

Tyr Ser Glu Arg Asp Pro Val Pro Gly Gly Cys Asn Leu Glu Phe Asp
    130                 135                 140

Leu Asp Ile Asp Pro Asn Ile Tyr Leu Glu Tyr Asn Phe Phe Glu Thr
145                 150                 155                 160

Thr Ile Lys Phe Ala Pro Ala Asn Leu Gly Tyr Ala Arg Gly Val Asp
            165                 170                 175

Pro Pro Pro Cys Asp Ala Gly Thr Asp Gln Asp Ser Arg Trp Arg Leu
            180                 185                 190

Gln Tyr Asp Val Tyr Gln Tyr Phe Leu Pro Glu Asn Asp Leu Thr Glu
    195                 200                 205

Glu Met Leu Leu Lys His Leu Gln Arg Met Val Ser Val Pro Gln Val
    210                 215                 220

Lys Ala Ser Ala Leu Lys Val Val Thr Leu Thr Ala Asn Asp Lys Thr
225                 230                 235                 240

Ser Val Ser Phe Ser Ser Leu Pro Gly Gln Gly Val Ile Tyr Asn Val
            245                 250                 255

Ile Val Xaa Gly Pro Xaa Ser Lys Tyr Ile Cys Cys Leu His Ser Cys
        260                 265                 270

Ser His Ile Arg Leu Gln Leu Xaa Arg Ala Gly Arg Gly
    275                 280                 285
```

<210> 102

```
<211> 417
<212> PRT
<213> Homo sapiens

<400> 102
Leu Phe Leu Phe Ser Lys Tyr Thr His Ser Ile Arg Ile Gln Leu Phe
 1               5                  10                  15


Pro Phe Leu Arg Gly Val Asp Pro Pro Pro Cys Asp Ala Gly Thr Asp
            20                  25                  30


Gln Asp Ser Arg Trp Arg Leu Gln Tyr Asp Val Tyr Gln Tyr Phe Leu
            35                  40                  45


Pro Glu Asn Asp Leu Thr Glu Glu Met Leu Leu Lys His Leu Gln Arg
        50                  55                  60


Met Val Ser Val Pro Gln Val Lys Ala Ser Ala Leu Lys Val Val Thr
65                  70                  75                  80


Leu Thr Ala Asn Asp Lys Thr Ser Val Ser Phe Ser Ser Leu Pro Gly
                85                  90                  95


Gln Gly Val Ile Tyr Asn Val Ile Val Trp Asp Pro Phe Leu Asn Thr
            100                 105                 110


Ser Ala Ala Tyr Ile Pro Ala His Thr Tyr Ala Cys Ser Phe Glu Ala
            115                 120                 125


Gly Glu Gly Ser Cys Ala Ser Leu Gly Arg Val Ser Ser Lys Val Phe
        130                 135                 140


Phe Thr Leu Phe Ala Leu Leu Gly Phe Phe Ile Cys Phe Phe Gly His
145                 150                 155                 160


Arg Phe Trp Lys Thr Glu Leu Phe Phe Ile Gly Phe Ile Ile Met Gly
                165                 170                 175


Phe Phe Phe Tyr Ile Leu Ile Thr Arg Leu Thr Pro Ile Lys Tyr Asp
            180                 185                 190


Val Asn Leu Ile Leu Thr Ala Val Thr Gly Ser Val Gly Gly Met Phe
            195                 200                 205


Leu Val Ala Val Trp Trp Arg Phe Gly Ile Leu Ser Ile Cys Met Leu
    210                 215                 220


Cys Val Gly Leu Val Leu Gly Phe Leu Ile Ser Ser Val Thr Phe Phe
225                 230                 235                 240


Thr Pro Leu Gly Asn Leu Lys Ile Phe His Asp Asp Gly Val Phe Trp
                245                 250                 255


Val Thr Phe Ser Cys Ile Ala Ile Leu Ile Pro Val Val Phe Met Gly
                260                 265                 270


Cys Leu Arg Ile Leu Asn Ile Leu Thr Cys Gly Val Ile Gly Ser Tyr
            275                 280                 285


Ser Val Val Leu Ala Ile Asp Ser Tyr Trp Ser Thr Ser Leu Ser Tyr
```

```
              290                    295                    300

       Ile Thr Leu Asn Val Leu Lys Arg Ala Leu Asn Lys Asp Phe His Arg
       305                    310                    315 .              320

       Ala Phe Thr Asn Val Pro Phe Gln Thr Asn Asp Phe Ile Ile Leu Ala
                          325                    330                    335

       Val Trp Gly Met Leu Ala Val Ser Gly Ile Thr Leu Gln Ile Arg Arg
                      340                    345                    350

       Glu Arg Gly Arg Pro Phe Phe Pro Pro His Pro Tyr Lys Leu Trp Lys
                  355                    360                    365

       Gln Glu Arg Glu Arg Arg Val Thr Asn Ile Leu Asp Pro Ser Tyr His
           370                    375                    380

       Ile Pro Pro Leu Arg Glu Arg Leu Tyr Gly Arg Leu Thr Gln Ile Lys
       385                    390                    395                    400

       Gly Leu Phe Gln Lys Glu Gln Pro Ala Gly Glu Arg Thr Pro Leu Leu
                      405                    410                    415

      Leu
```

```
<210> 103
<211> 363
<212> PRT
<213> Homo sapiens

<400> 103
Met Gly Phe Leu Gln Leu Leu Val Val Ala Val Leu Ala Ser Glu His
 1            5                    10                    15

Arg Val Ala Gly Ala Ala Glu Val Phe Gly Asn Ser Ser Glu Gly Leu
             20                    25                    30

Ile Glu Phe Ser Val Gly Lys Phe Arg Tyr Phe Glu Leu Asn Arg Pro
         35                    40                    45

Phe Pro Glu Glu Ala Ile Leu His Asp Ile Ser Ser Asn Val Thr Phe
     50                    55                    60

Leu Ile Phe Gln Ile His Ser Gln Tyr Gln Asn Thr Thr Val Ser Phe
 65                    70                    75                    80

Ser Pro Thr Leu Leu Ser Asn Ser Ser Glu Thr Gly Thr Ala Ser Gly
                 85                    90                    95

Leu Val Phe Ile Leu Arg Pro Glu Gln Ser Thr Cys Thr Trp Tyr Leu
             100                   105                   110

Gly Thr Ser Gly Ile Gln Pro Val Gln Asn Met Ala Ile Leu Leu Ser
         115                   120                   125

Tyr Ser Glu Arg Asp Pro Val Pro Gly Gly Cys Asn Leu Glu Phe Asp
     130                   135                   140
```

                               52.

```
Leu Asp Ile Asp Pro Asn Ile Tyr Leu Glu Tyr Asn Phe Phe Glu Thr
145                 150             155             160

Thr Ile Lys Phe Ala Pro Ala Asn Leu Gly Tyr Ala Arg Gly Val Asp
                165             170             175

Pro Pro Pro Cys Asp Ala Gly Thr Asp Gln Asp Ser Arg Trp Arg Leu
            180             185             190

Gln Tyr Asp Val Tyr Gln Tyr Phe Leu Pro Glu Asn Asp Leu Thr Glu
        195             200             205

Glu Met Leu Leu Lys His Leu Gln Arg Met Val Ser Val Pro Gln Val
    210             215             220

Lys Ala Ser Ala Leu Lys Val Val Thr Leu Thr Ala Asn Asp Lys Thr
225             230             235             240

Ser Val Ser Phe Ser Ser Leu Pro Gly Gln Gly Val Ile Tyr Asn Val
            245             250             255

Ile Val Trp Asp Leu Phe Leu Asn Thr Ser Ala Ala Tyr Ile Pro Ala
            260             265             270

His Thr Tyr Ala Cys Ser Phe Glu Ala Gly Glu Gly Ser Cys Ala Ser
        275             280             285

Leu Gly Arg Val Ser Ser Lys Val Phe Phe Thr Leu Phe Ala Leu Leu
    290             295             300

Gly Phe Phe Ile Cys Phe Phe Gly Gln Arg Phe Trp Lys Thr Glu Leu
305             310             315             320

Phe Phe Ile Gly Phe Ile Ile Met Gly Phe Phe Tyr Ile Leu Ile
            325             330             335

Thr Arg Leu Thr Pro Ile Lys Tyr Asp Ala Glu His Thr Asp Leu Trp
        340             345             350

Ser His Trp Leu Leu Phe Gly Gly Phe Ser His
    355             360
```

<210> 104
<211> 79
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (42)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (49)
<223> Xaa equals any of the naturally occurring L-amino acids.

```
<220>
<221> SITE
<222> (69)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (76)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 104
Met Leu Val Lys Gly Glu Gly Val Arg Leu Val Leu Arg Leu Leu Gly
 1               5                  10                  15

Arg Asn Gly Leu His Leu Ala Pro Leu Pro Ala Leu Leu Leu His Phe
            20                  25                  30

Leu Met Leu Pro Leu Ser Ala Pro Val Xaa Tyr Ser Leu Pro Ala Gly
        35                  40                  45

Xaa Cys Leu Gln Gly Thr Gly Ser Ser Ser Phe Tyr Ser Val Lys Phe
    50                  55                  60

Ser Gly Ser Leu Xaa Gly Gly Lys Gly Lys Pro Xaa Asn Trp Pro
65                  70                  75
```

```
<210> 105
<211> 71
<212> PRT
<213> Homo sapiens

<400> 105
Met Leu Val Lys Gly Glu Gly Val Arg Leu Val Leu Arg Leu Leu Gly
 1               5                  10                  15

Arg Asn Gly Leu His Leu Ala Pro Leu Pro Ala Leu Leu Leu His Phe
            20                  25                  30

Leu Met Leu Pro Leu Ser Ala Pro Val Ala Tyr Ser Leu Pro Ala Gly
        35                  40                  45

Ala Cys Leu Gln Gly Thr Gly Ser Ser Ser Leu Leu Leu Cys Gln Val
    50                  55                  60

Gln Leu Leu Thr Ala Arg Glu
65                  70
```

```
<210> 106
<211> 31
<212> PRT
<213> Homo sapiens

<400> 106
Met Phe Glu Ala Leu Trp Ala Thr Asp Tyr Leu Cys Cys Leu Phe Leu
 1               5                  10                  15
```

```
Phe Val Ser Phe Phe Arg Pro Leu Gln Lys Cys Lys Asn His Ser
            20                  25                  30


<210> 107
<211> 26
<212> PRT
<213> Homo sapiens

<400> 107
Glu Ile Met Thr Arg Thr Asp Trp Val Lys Met Trp Phe Val Phe Leu
 1               5                  10                  15

Leu Gln Leu Ala Pro Ala Cys Pro Pro Arg
            20                  25


<210> 108
<211> 31
<212> PRT
<213> Homo sapiens

<400> 108
Met Phe Glu Ala Leu Trp Ala Thr Asp Tyr Leu Cys Cys Leu Phe Leu
 1               5                  10                  15

Phe Val Ser Phe Phe Arg Pro Leu Gln Lys Cys Lys Asn His Ser
            20                  25                  30


<210> 109
<211> 118
<212> PRT
<213> Homo sapiens

<400> 109
Met Glu Phe Val Ser Gly Gly Lys Thr Glu Ile Leu Met Leu Phe Thr
 1               5                  10                  15

Leu Leu Val Ser Cys Tyr Val Phe Leu Pro Leu Ala Leu Pro Cys Phe
            20                  25                  30

Ala Phe Phe Phe Ser Phe Trp Pro Ile Pro Phe Tyr Met Cys Pro Gln
        35                  40                  45

Gln Arg Trp Gly Asp Thr Glu His Pro Gly Ser Phe Pro Ala Leu Leu
    50                  55                  60

Gly Arg Pro Arg Leu Gln Ala Pro Ala Val Glu Thr Leu Lys Gly Asn
65                  70                  75                  80

Lys Gln Pro Ser Thr Leu Pro Asp Pro Arg Leu Phe Arg Glu Ala Ala
                85                  90                  95

His Phe His Pro Gly Pro Arg Thr Pro Ser Leu Cys Pro Thr Arg Ile
            100                 105                 110
```

Ser Leu Asn Gly Arg Asp
        115

<210> 110
<211> 157
<212> PRT
<213> Homo sapiens

<400> 110
Ser Cys Leu Pro Pro Leu Pro Leu Asn Leu Pro Leu Pro Pro Cys Leu
  1   5   10   15

Cys Pro Leu Leu Gln Leu Asn Ala Ala Met Thr Arg Lys Glu Lys Thr
            20   25   30

Lys Glu Gly Gln Arg Ala Ala Gln Phe Ser Ala Gly Ala Asp Ala Gly
            35   40   45

Ser Gly Gly Gly Leu Ser Arg Gln Lys Asp Thr Lys Arg Pro Met Leu
      50   55   60

Leu Val Ile His Asp Val Val Leu Glu Leu Leu Thr Ser Ser Asp Cys
 65   70   75   80

His Ala Asn Pro Arg Lys Tyr Pro Thr Cys Gln Lys Ser Glu Val Leu
                85   90   95

Gly Val Ser Ile Tyr Val Ser Ile Cys Pro Ser Thr Arg Pro Arg Asp
                100   105   110

Lys Asn Lys Thr Lys Lys Arg Cys Gln Val Leu Glu Ala Val Leu Val
            115   120   125

Ser Lys Pro Ser Gly Ser Cys His Gln Gly Ser Phe Glu Ile Val Pro
      130   135   140

His Val Lys Gly Asn Leu Ala Phe Thr Ser Ser Asn His
145   150   155

<210> 111
<211> 118
<212> PRT
<213> Homo sapiens

<400> 111
Met Glu Phe Val Ser Gly Gly Lys Thr Glu Ile Leu Met Leu Phe Thr
  1   5   10   15

Leu Leu Val Ser Cys Tyr Val Phe Leu Pro Leu Ala Leu Pro Cys Phe
            20   25   30

Ala Phe Phe Phe Ser Phe Trp Pro Ile Pro Phe Tyr Met Cys Pro Gln
            35   40   45

Gln Arg Trp Gly Asp Thr Glu His Pro Gly Ser Phe Pro Ala Leu Leu
      50   55   60

Gly Arg Pro Arg Leu Gln Ala Pro Ala Val Glu Thr Leu Lys Gly Asn
65   70   75   80

Lys Gln Pro Ser Thr Leu Pro Asp Pro Arg Leu Phe Arg Glu Ala Ala
                85   90   95

His Phe His Pro Gly Pro Arg Thr Pro Ser Leu Cys Pro Thr Arg Ile
            100   105   110

Ser Leu Asn Gly Arg Asp
        115

<210> 112
<211> 74
<212> PRT
<213> Homo sapiens

<400> 112
Leu Ala Leu His Arg Cys Ser Leu Ser Cys Leu Gln Val Ser Val Cys
 1   5   10   15

Gly Val Gly Tyr Gly Glu Glu Asn Leu His Gly Gly Pro Pro Gly Leu
            20   25   30

Val Val Gln Ala Val Pro Arg His Ile Leu Ile Pro Ser Met Gly His
        35   40   45

Leu Lys Met Asn Asn Asn Ser Gln Asn Phe Cys Glu Ile Lys Ser Ser
    50   55   60

Phe Lys Arg Ser His Leu Ser Lys Arg Phe
65   70

<210> 113
<211> 199
<212> PRT
<213> Homo sapiens

<400> 113
Met Lys Ser Gly Leu Trp Tyr Phe Phe Leu Phe Cys Leu Arg Ile Lys
 1   5   10   15

Val Leu Thr Gly Glu Ile Asn Gly Ser Ala Asn Tyr Glu Met Phe Ile
            20   25   30

Phe His Asn Gly Gly Val Gln Ile Leu Cys Lys Tyr Pro Asp Ile Val
        35   40   45

Gln Gln Phe Lys Met Gln Leu Leu Lys Gly Gly Gln Ile Leu Cys Asp
    50   55   60

Leu Thr Lys Thr Lys Gly Ser Gly Asn Thr Val Ser Ile Lys Ser Leu
65   70   75   80

Lys Phe Cys His Ser Gln Leu Ser Asn Asn Ser Val Ser Phe Phe Leu

                             57

```
                    85                    90                    95
Tyr Asn Leu Asp His Ser His Ala Asn Tyr Tyr Phe Cys Asn Leu Ser
            100                 105                 110

Ile Phe Asp Pro Pro Pro Phe Lys Val Thr Leu Thr Gly Gly Tyr Leu
            115                 120                 125

His Ile Tyr Glu Ser Gln Leu Cys Cys Gln Leu Lys Phe Trp Leu Pro
    130                 135                 140

Ile Gly Cys Ala Ala Phe Val Val Val Cys Ile Leu Gly Cys Ile Leu
145                 150                 155                 160

Ile Cys Trp Leu Thr Lys Lys Lys Tyr Ser Ser Ser Val His Asp Pro
                165                 170                 175

Asn Gly Glu Tyr Met Phe Met Arg Ala Val Asn Thr Ala Lys Lys Ser
            180                 185                 190

Arg Leu Thr Asp Val Thr Leu
            195
```

```
<210> 114
<211> 199
<212> PRT
<213> Homo sapiens

<400> 114
Met Lys Ser Gly Leu Trp Tyr Phe Phe Leu Phe Cys Leu Arg Ile Lys
  1               5                 10                  15

Val Leu Thr Gly Glu Ile Asn Gly Ser Ala Asn Tyr Glu Met Phe Ile
            20                  25                  30

Phe His Asn Gly Gly Val Gln Ile Leu Cys Lys Tyr Pro Asp Ile Val
        35                  40                  45

Gln Gln Phe Lys Met Gln Leu Leu Lys Gly Gly Gln Ile Leu Cys Asp
    50                  55                  60

Leu Thr Lys Thr Lys Gly Ser Gly Asn Thr Val Ser Ile Lys Ser Leu
65                  70                  75                  80

Lys Phe Cys His Ser Gln Leu Ser Asn Asn Ser Val Ser Phe Phe Leu
                85                  90                  95

Tyr Asn Leu Asp His Ser His Ala Asn Tyr Tyr Phe Cys Asn Leu Ser
            100                 105                 110

Ile Phe Asp Pro Pro Pro Phe Lys Val Thr Leu Thr Gly Gly Tyr Leu
            115                 120                 125

His Ile Tyr Glu Ser Gln Leu Cys Cys Gln Leu Lys Phe Trp Leu Pro
    130                 135                 140

Ile Gly Cys Ala Ala Phe Val Val Val Cys Ile Leu Gly Cys Ile Leu
145                 150                 155                 160
```

```
Ile Cys Trp Leu Thr Lys Lys Lys Tyr Ser Ser Ser Val His Asp Pro
                165                 170                 175

Asn Gly Glu Tyr Met Phe Met Arg Ala Val Asn Thr Ala Lys Lys Ser
                180                 185                 190

Arg Leu Thr Asp Val Thr Leu
        195
```

```
<210> 115
<211> 91
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (12)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (49)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (51)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 115
Met Val Leu Arg Gly Trp Gly Leu Ala Trp Ser Xaa Ser Pro Val Val
  1           5                 10                  15

Cys Gly Tyr Ser Gly Asp Met Lys Gly Val Cys Trp Gly Arg Ser Asp
                20                  25                  30

His Ser Leu Leu Pro Ser Glu Ile Leu Leu Pro Pro Ala Pro Cys Pro
            35                  40                  45

Xaa Ser Xaa Val Leu His Asn Pro Pro Pro Thr Pro His Leu Pro Ser
        50                  55                  60

Pro Val Leu Val Arg Ile Gln Glu Ala Pro Thr Trp Ala Gln Arg Ser
 65                  70                  75                  80

Ser Leu Gly Ala Ser Pro Leu His Lys Gly Asp
                85                  90
```

```
<210> 116
<211> 6
<212> PRT
<213> Homo sapiens

<400> 116
Trp Ala Leu Pro Met Ser
```

1   5

<210> 117
<211> 14
<212> PRT
<213> Homo sapiens

<400> 117
Gly Cys Ser Leu Tyr Asn Ser Phe Asn Asn Leu Leu Cys Leu
1   5   10

<210> 118
<211> 4
<212> PRT
<213> Homo sapiens

<400> 118
Leu Arg Glu Leu
    1

<210> 119
<211> 91
<212> PRT
<213> Homo sapiens

<400> 119
Met Val Leu Arg Gly Trp Gly Leu Ala Trp Ser Leu Ser Pro Val Val
1   5   10   15

Cys Gly Tyr Ser Gly Asp Met Lys Gly Val Cys Trp Gly Arg Ser Asp
            20   25   30

His Ser Leu Leu Pro Ser Glu Ile Leu Leu Pro Pro Ala Pro Cys Pro
        35   40   45

Ser Ser Ala Val Leu His Asn Pro Pro Pro Thr Pro His Leu Pro Ser
        50   55   60

Pro Val Leu Val Arg Ile Gln Glu Ala Pro Thr Trp Ala Gln Arg Ser
    65   70   75   80

Ser Leu Gly Ala Ser Pro Leu His Lys Gly Asp
                    85   90

<210> 120
<211> 75
<212> PRT
<213> Homo sapiens

<400> 120
Glu Asp Met Pro Arg Arg Lys Glu Glu Leu Thr Asp Tyr Gln Lys Lys
    1   5   10   15

```
Lys Val Ile Leu Gln Asn Leu Lys His Ser Leu Phe Leu Ser Leu Leu
            20              25              30

Ser His Tyr Phe Tyr Ser Asn Pro Leu Glu Tyr Leu His Phe Ala Ser
        35              40              45

Glu Gln Arg Asp Lys Phe Phe Ser His His Val Cys Thr Gly Val Val
    50              55              60

Leu Ile Leu Asp Ile Ala Gly Thr Asn Phe Ser
65              70              75
```

```
<210> 121
<211> 56
<212> PRT
<213> Homo sapiens

<400> 121
Met Met Ile Tyr Phe Ala Leu Leu Leu Ala Ser Leu Phe Phe Leu Leu
 1           5              10              15

Lys Val Lys Ser His Phe Gly Cys Lys Asn Val Thr Thr Thr Ser Ala
            20              25              30

Arg Ile Phe Leu Lys Pro Leu Cys Thr Pro Lys Ser Ile Phe Pro Leu
        35              40              45

Ser Arg Tyr Gly Arg Met Ser Ser
    50              55
```

```
<210> 122
<211> 56
<212> PRT
<213> Homo sapiens

<400> 122
Met Met Ile Tyr Phe Ala Leu Leu Leu Ala Ser Leu Phe Phe Leu Leu
 1           5              10              15

Lys Val Lys Ser His Phe Gly Cys Lys Asn Val Thr Thr Thr Ser Ala
            20              25              30

Arg Ile Phe Leu Lys Pro Leu Cys Thr Pro Lys Ser Ile Phe Pro Leu
        35              40              45

Ser Arg Tyr Gly Arg Met Ser Ser
    50              55
```

```
<210> 123
<211> 59
<212> PRT
<213> Homo sapiens
```

<400> 123
```
Met Gly Asn Gln Asp Glu Asn Gln Gly Leu Ser Val Ile Arg Leu Leu
 1               5                  10                  15

Leu Ile Ile Thr Ile Arg Arg Val Gln Met Trp Asp Lys Ile Leu Thr
            20                  25                  30

Pro Ala Phe Ser Gln Met Val Asn Leu Pro Val Ala Leu Glu Leu His
        35                  40                  45

Ile Val Leu Phe Val Cys Phe Thr Glu Ser Val
        50              55
```

<210> 124
<211> 114
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (7)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (22)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (24)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (111)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 124
```
Gln Arg Ala Met Ala Cys Xaa Phe Gly Ile Leu Leu Ile Val Ser Ala
 1               5                  10                  15

Thr Leu Cys Phe Gly Xaa Leu Xaa Gly Phe Leu Met Thr Leu Pro Gln
            20                  25                  30

Lys Arg Lys Ser Phe Gln Ser Lys Ser Phe Val Arg Leu Lys Asp Val
        35                  40                  45

Thr Ala Tyr Met Trp Glu Lys Val Leu Thr Phe Leu Arg Leu Glu Thr
        50                  55                  60

Pro Lys Leu Glu Glu Ala Glu Met Val Glu Asn His Asn Tyr Tyr Leu
 65                  70                  75                  80

Asp Glu Phe Ala Asn Leu Leu Asp Glu Leu Leu Met Lys Ile Asn Gly
                85                  90                  95

Leu Ser Asp Ser Leu Gln Leu Pro Leu Leu Glu Lys Thr Ser Xaa Asn
```

62

```
            100                 105                 110

Thr Gly



<210> 125
<211> 85
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (81)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (84)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 125
Met Asp Ile Leu Met Leu Leu Leu Leu Leu Cys Val Ile Tyr Gly Arg
 1           5                   10                  15

Phe Ser Gln Asp Glu Tyr Ser Leu Asn Gln Ala Ile Arg Lys Glu Phe
            20                  25                  30

Thr Arg Asn Ala Arg Asn Cys Leu Gly Gly Leu Arg Asn Ile Ala Asp
        35                  40                  45

Trp Trp Asp Trp Ser Leu Thr Thr Leu Leu Asp Gly Leu Tyr Pro Gly
    50                  55                  60

Gly Thr Pro Ser Ala Arg Val Pro Gly Ala Ser Ala Trp Ser Ser Trp
65                  70                  75                  80

Xaa Lys Met Xaa Thr
                85



<210> 126
<211> 561
<212> PRT
<213> Homo sapiens

<400> 126
Met Asp Ile Leu Met Leu Leu Leu Leu Leu Cys Val Ile Tyr Gly Arg
 1           5                   10                  15

Phe Ser Gln Asp Glu Tyr Ser Leu Asn Gln Ala Ile Arg Lys Glu Phe
            20                  25                  30

Thr Arg Asn Ala Arg Asn Cys Leu Gly Gly Leu Arg Asn Ile Ala Asp
        35                  40                  45

Trp Trp Asp Trp Ser Leu Thr Thr Leu Leu Asp Gly Leu Tyr Pro Gly
    50                  55                  60
```

63

Gly Thr Pro Ser Ala Arg Val Pro Gly Ala Gln Pro Gly Ala Leu Gly
65   70   75   80

Gly Lys Cys Tyr Leu Ile Gly Ser Ser Val Ile Arg Gln Leu Lys Val
            85   90   95

Phe Pro Arg His Leu Cys Lys Pro Pro Arg Pro Phe Ser Ala Leu Ile
        100   105   110

Glu Asp Ser Ile Pro Thr Cys Ser Pro Glu Val Gly Gly Pro Glu Asn
        115   120   125

Pro Tyr Leu Ile Asp Pro Glu Asn Gln Asn Val Thr Leu Asn Gly Pro
    130   135   140

Gly Gly Cys Gly Thr Arg Glu Asp Cys Val Leu Ser Leu Gly Arg Thr
145   150   155   160

Arg Thr Glu Ala His Thr Ala Leu Ser Arg Leu Arg Ala Ser Met Trp
                165   170   175

Ile Asp Arg Ser Thr Arg Ala Val Ser Val His Phe Thr Leu Tyr Asn
        180   185   190

Pro Pro Thr Gln Leu Phe Thr Ser Val Ser Leu Arg Val Glu Ile Leu
        195   200   205

Pro Thr Gly Ser Leu Val Pro Ser Ser Leu Val Glu Ser Phe Ser Ile
    210   215   220

Phe Arg Ser Asp Ser Ala Leu Gln Tyr His Leu Met Leu Pro Gln Leu
225   230   235   240

Val Phe Leu Ala Leu Ser Leu Ile His Leu Cys Val Gln Leu Tyr Arg
            245   250   255

Met Met Asp Lys Gly Val Leu Ser Tyr Trp Arg Lys Pro Arg Asn Trp
            260   265   270

Leu Glu Leu Ser Val Val Gly Val Ser Leu Thr Tyr Tyr Ala Val Ser
        275   280   285

Gly His Leu Val Thr Leu Ala Gly Asp Val Thr Asn Gln Phe His Arg
    290   295   300

Gly Leu Cys Arg Ala Phe Met Asp Leu Thr Leu Met Ala Ser Trp Asn
305   310   315   320

Gln Arg Ala Arg Trp Leu Arg Gly Ile Leu Leu Phe Leu Phe Thr Leu
            325   330   335

Lys Cys Val Tyr Leu Pro Gly Ile Gln Asn Thr Met Ala Ser Cys Ser
            340   345   350

Ser Met Met Arg His Ser Leu Pro Ser Ile Phe Val Ala Gly Leu Val
        355   360   365

Gly Ala Leu Met Leu Ala Ala Leu Ser His Leu His Arg Phe Leu Leu
    370   375   380

64

```
Ser Met Trp Val Leu Pro Pro Gly Thr Phe Thr Asp Ala Phe Pro Gly
385                 390             395                 400

Leu Leu Phe His Phe Pro Arg Arg Ser Gln Lys Asp Cys Leu Leu Gly
            405             410             415

Leu Ser Lys Ser Asp Gln Arg Ala Met Ala Cys Tyr Phe Gly Ile Leu
        420             425             430

Leu Ile Val Ser Ala Thr Leu Cys Phe Gly Met Leu Arg Gly Phe Leu
        435             440             445

Met Thr Leu Pro Gln Lys Arg Lys Ser Phe Gln Ser Lys Ser Phe Val
    450             455             460

Arg Leu Lys Asp Val Thr Ala Tyr Met Trp Glu Lys Val Leu Thr Phe
465             470             475                 480

Leu Arg Leu Glu Thr Pro Lys Leu Glu Glu Ala Glu Met Val Glu Asn
            485             490             495

His Asn Tyr Tyr Leu Asp Glu Phe Ala Asn Leu Leu Asp Glu Leu Leu
        500             505             510

Met Lys Ile Asn Gly Leu Ser Asp Ser Leu Gln Leu Pro Leu Leu Glu
        515             520             525

Lys Thr Ser Asn Asn Thr Gly Glu Ala Arg Thr Glu Glu Ser Pro Leu
    530             535             540

Val Asp Ile Ser Ser Tyr Gln Ala Ala Glu Pro Ala Asp Ile Lys Asp
545             550             555                 560

Phe
```

```
<210> 127
<211> 88
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (1)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (19)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (81)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 127
```

```
Xaa His Lys Thr Phe Pro Ser Glu Gly Ser Ser Cys Leu Ser Ser Val
 1               5                   10                  15

Thr Leu Xaa Thr Thr Ala Gln Ala Tyr Phe Thr Leu Pro Pro Pro Thr
            20              25                  30

His His Cys Pro Leu Ser Ala Thr Lys Pro His Tyr Ser Ser Asn Asp
        35                  40                  45

Ala Ser Leu Val Ser Gly Lys Pro Ile Trp Cys Thr Lys Met Leu Cys
    50                  55                  60

Asn Thr Lys Trp Leu Leu Pro Leu Ile Leu Leu Asn Asn Val Asn Ser
65                  70                  75                  80

Xaa Arg Ile Asn Phe Met Leu Cys
                85
```

```
<210> 128
<211> 56
<212> PRT
<213> Homo sapiens

<400> 128
Met Trp Lys Val Leu Arg Pro Ser Leu Phe Thr Ala Gly Leu Phe Thr
 1               5                   10                  15

Ala Ser Phe Phe Tyr Ser Asp Leu Lys Val Ser Thr Glu Leu Met Lys
            20                  25                  30

Leu Gln His Met Val Phe Lys Ser Phe Pro Leu Lys Cys Thr Leu Glu
        35                  40                  45

Asn Trp Val Pro Gln Pro His Tyr
    50                  55
```

```
<210> 129
<211> 58
<212> PRT
<213> Homo sapiens

<400> 129
Met Trp Lys Val Leu Arg Pro Ser Leu Phe Thr Ala Gly Leu Phe Thr
 1               5                   10                  15

Ala Ser Phe Phe Tyr Ser Asp Leu Lys Val Ser Thr Glu Leu Met Lys
            20                  25                  30

Leu Gln His Met Val Phe Lys Ser Phe Pro Leu Lys Cys Thr Leu Glu
        35                  40                  45

Asn Trp Val Pro Gln Pro Gln Leu Leu Asn
    50                  55
```

```
<210> 130
<211> 32
<212> PRT
<213> Homo sapiens

<400> 130
Cys Leu Glu Thr Phe Trp Ser Leu Tyr Leu Gly Gly Trp Gly Met Val
 1               5                  10                  15

Gly Cys Val Cys Tyr Trp His Pro Val Asn Arg Ser Gln Gly Cys Arg
            20                  25                  30
```

```
<210> 131
<211> 199
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (142)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 131
Met Lys Leu Gly Cys Val Leu Met Ala Trp Ala Leu Tyr Leu Ser Leu
 1               5                  10                  15

Gly Val Leu Trp Val Ala Gln Met Leu Leu Ala Ala Ser Phe Glu Thr
            20                  25                  30

Leu Gln Cys Glu Gly Pro Val Cys Thr Glu Glu Ser Ser Cys His Thr
         35                  40                  45

Glu Asp Asp Leu Thr Asp Ala Arg Glu Ala Gly Phe Gln Val Lys Ala
     50                  55                  60

Tyr Thr Phe Ser Glu Pro Phe His Leu Ile Val Ser Tyr Asp Trp Leu
 65                  70                  75                  80

Ile Leu Gln Gly Pro Ala Lys Pro Val Phe Glu Gly Asp Leu Leu Val
                85                  90                  95

Leu Arg Cys Gln Ala Trp Gln Asp Trp Pro Leu Thr Gln Val Thr Phe
            100                 105                 110

Tyr Arg Asp Gly Ser Ala Leu Gly Pro Pro Gly Pro Asn Arg Glu Phe
        115                 120                 125

Ser Ile Thr Val Val Gln Lys Ala Asp Ser Gly His Tyr Xaa Cys Ser
        130                 135                 140

Gly Ile Phe Gln Ser Pro Gly Pro Gly Ile Pro Glu Thr Ala Ser Val
145                 150                 155                 160

Val Ala Ile Thr Val Gln Glu Leu Phe Pro Ala Pro Ile Leu Leu Leu
                165                 170                 175
```

67

Gln Gly Trp Lys Asp Ser Ala Lys Gln Gly Gly Ser Pro Gln Asn Ser
            180   185   190

Arg Ser Pro Gln Leu Gln Lys
        195

<210> 132
<211> 2
<212> PRT
<213> Homo sapiens

<400> 132
Ser Trp
  1

<210> 133
<211> 359
<212> PRT
<213> Homo sapiens

<400> 133
Met Lys Leu Gly Cys Val Leu Met Ala Trp Ala Leu Tyr Leu Ser Leu
  1   5   10   15

Gly Val Leu Trp Val Ala Gln Met Leu Leu Ala Ala Ser Phe Glu Thr
            20   25   30

Leu Gln Cys Glu Gly Pro Val Cys Thr Glu Glu Ser Ser Cys His Thr
        35   40   45

Glu Asp Asp Leu Thr Asp Ala Arg Glu Ala Gly Phe Gln Val Lys Ala
    50   55   60

Tyr Thr Phe Ser Glu Pro Phe His Leu Ile Val Ser Tyr Asp Trp Leu
65   70   75   80

Ile Leu Gln Gly Pro Ala Lys Pro Val Phe Glu Gly Asp Leu Leu Val
            85   90   95

Leu Arg Cys Gln Ala Trp Gln Asp Trp Pro Leu Thr Gln Val Thr Phe
            100   105   110

Tyr Arg Asp Gly Ser Ala Leu Gly Pro Pro Gly Pro Asn Arg Glu Phe
        115   120   125

Ser Ile Thr Val Val Gln Lys Ala Asp Ser Gly His Tyr His Cys Ser
    130   135   140

Gly Ile Phe Gln Ser Pro Gly Pro Gly Ile Pro Glu Thr Ala Ser Val
145   150   155   160

Val Ala Ile Thr Val Gln Glu Leu Phe Pro Ala Pro Ile Leu Arg Ala
                165   170   175

Val Pro Ser Ala Glu Pro Gln Ala Gly Gly Pro Met Thr Leu Ser Cys
                               68

                    180   185   190

Gln Thr Lys Leu Pro Leu Gln Arg Ser Ala Ala Arg Leu Leu Phe Ser
        195   200   205

Phe Tyr Lys Asp Gly Arg Ile Val Gln Ser Arg Gly Leu Ser Ser Glu
        210   215   220

Phe Gln Ile Pro Thr Ala Ser Glu Asp His Ser Gly Ser Tyr Trp Cys
225   230   235   240

Glu Ala Ala Thr Glu Asp Asn Gln Val Trp Lys Gln Ser Pro Gln Leu
            245   250   255

Glu Ile Arg Val Gln Gly Ala Ser Ser Ser Ala Ala Pro Pro Thr Leu
        260   265   270

Asn Pro Ala Pro Gln Lys Ser Ala Ala Pro Gly Thr Ala Pro Glu Glu
        275   280   285

Ala Pro Gly Pro Leu Pro Pro Pro Pro Thr Pro Ser Ser Glu Asp Pro
        290   295   300

Gly Phe Ser Ser Pro Leu Gly Met Pro Asp Pro His Leu Tyr His Gln
305   310   315   320

Met Gly Leu Leu Leu Lys His Met Gln Asp Val Arg Val Leu Leu Gly
            325   330   335

His Leu Leu Met Glu Leu Arg Glu Leu Ser Gly His Arg Lys Pro Gly
        340   345   350

Thr Thr Lys Ala Thr Ala Glu
        355

<210> 134
<211> 5
<212> PRT
<213> Homo sapiens

<400> 134
Met Ser Arg Leu Leu
  1   5

<210> 135
<211> 5
<212> PRT
<213> Homo sapiens

<400> 135
Met Ser Arg Leu Leu
  1   5

<210> 136

```
<211> 63
<212> PRT
<213> Homo sapiens

<400> 136
Phe Leu His Val Phe Thr Ser Val Glu Leu Leu Arg Leu Ser Ser Pro
  1               5                  10                  15

Pro Leu Pro Lys Pro Lys Tyr Lys Arg Lys Ser Ser Pro Leu Leu Met
            20              25              30

Ala Glu Arg Ile Leu Ser Val Ser Gly Leu Phe Gly His Arg Leu Asn
        35              40                  45

Lys Gly Leu Leu Ile His Pro Lys Lys Lys Lys Lys Leu Glu
    50              55              60
```

```
<210> 137
<211> 438
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (42)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 137
Leu Thr Ile Thr Val His Asp Pro Asn Ala Ala Gln Trp Tyr Tyr Gly
  1               5                  10                  15

Met Ser Trp Gly Leu Arg Leu Tyr Ile Pro Gly Phe Asp Val Gly Thr
            20              25              30

Met Phe Thr Ile Gln Lys Lys Ile Leu Xaa Ser Trp Ser Pro Pro Lys
        35              40                  45

Pro Ile Arg Pro Leu Thr Asp Leu Gly Asp Pro Ile Phe Gln Lys His
    50              55                  60

Pro Asp Lys Val Asp Leu Thr Val Pro Gln Pro Phe Leu Val Pro Arg
65                  70                  75                  80

Pro Gln Leu Gln Gln Gln His Leu Gln Pro Ser Leu Met Ser Ile Leu
                85                  90                  95

Gly Gly Val His His Leu Leu Asn Leu Thr Gln Pro Lys Leu Ala Gln
            100             105             110

Asp Cys Trp Leu Cys Leu Lys Ala Lys Pro Pro Tyr Tyr Val Gly Leu
        115             120             125

Gly Val Glu Ala Thr Leu Lys Arg Gly Pro Leu Ser Cys His Thr Arg
    130             135             140

Pro Arg Ala Leu Thr Ile Gly Asp Val Ser Gly Asn Ala Ser Cys Leu
145             150             155             160
```

```
Ile Ser Thr Gly Tyr Asn Leu Ser Ala Ser Pro Phe Gln Ala Thr Cys
              165                   170                   175

Asn Gln Ser Leu Leu Thr Tyr Ile Ser Thr Ser Val Ser Tyr Gln Ala
          180                   185                   190

Pro Asn Asn Thr Trp Leu Ala Cys Thr Ser Gly Leu Thr Arg Cys Ile
          195                   200                   205

Asn Gly Thr Glu Pro Gly Pro Leu Leu Cys Val Leu Val His Val Leu
    210                   215                   220

Pro Gln Val Tyr Val Tyr Ser Gly Pro Glu Gly Arg Gln Leu Ile Ala
225                   230                   235                   240

Pro Pro Glu Leu His Pro Arg Leu His Gln Ala Val Pro Leu Leu Val
              245                   250                   255

Pro Leu Leu Ala Gly Leu Ser Ile Ala Gly Ser Ala Ala Ile Gly Thr
          260                   265                   270

Ala Ala Leu Val Gln Gly Glu Thr Gly Leu Ile Ser Leu Ser Gln Gln
          275                   280                   285

Val Asp Ala Asp Phe Ser Asn Leu Gln Ser Ala Ile Asp Ile Leu His
    290                   295                   300

Ser Gln Val Glu Ser Leu Ala Glu Val Val Leu Gln Asn Cys Arg Cys
305                   310                   315                   320

Leu Asp Leu Leu Phe Leu Ser Gln Gly Gly Leu Cys Ala Ala Leu Gly
              325                   330                   335

Glu Ser Cys Cys Phe Tyr Ala Asn Gln Ser Gly Val Ile Lys Gly Thr
          340                   345                   350

Val Lys Lys Val Arg Glu Asn Leu Asp Arg His Gln Gln Glu Arg Glu
          355                   360                   365

Asn Asn Ile Pro Trp Tyr Gln Ser Met Phe Asn Trp Asn Pro Trp Leu
    370                   375                   380

Thr Thr Leu Ile Thr Gly Leu Ala Gly Pro Leu Leu Ile Leu Leu Leu
385                   390                   395                   400

Ser Leu Ile Phe Gly Pro Cys Ile Leu Asn Ser Phe Leu Asn Phe Ile
              405                   410                   415

Lys Gln Arg Ile Ala Ser Val Lys Leu Thr Tyr Leu Lys Thr Gln Tyr
          420                   425                   430

Asp Thr Leu Val Asn Asn
        435
```

```
<210> 138
<211> 438
<212> PRT
<213> Homo sapiens
```

<400> 138

```
Leu Thr Ile Thr Val His Asp Pro Asn Ala Ala Gln Trp Tyr Tyr Gly
 1           5               10              15

Met Ser Trp Gly Leu Arg Leu Tyr Ile Pro Gly Phe Asp Val Gly Thr
            20              25              30

Met Phe Thr Ile Gln Lys Lys Ile Leu Val Ser Trp Ser Pro Pro Lys
        35              40              45

Pro Ile Arg Pro Leu Thr Asp Leu Gly Asp Pro Ile Phe Gln Lys His
    50              55              60

Pro Asp Lys Val Asp Leu Thr Val Pro Gln Pro Phe Leu Val Pro Arg
65              70              75              80

Pro Gln Leu Gln Gln Gln His Leu Gln Pro Ser Leu Met Ser Ile Leu
            85              90              95

Gly Gly Val His His Leu Leu Asn Leu Thr Gln Pro Lys Leu Ala Gln
            100             105             110

Asp Cys Trp Leu Cys Leu Lys Ala Lys Pro Pro Tyr Tyr Val Gly Leu
    115             120             125

Gly Val Glu Ala Thr Leu Lys Arg Gly Pro Leu Ser Cys His Thr Arg
    130             135             140

Pro Arg Ala Leu Thr Ile Gly Asp Val Ser Gly Asn Ala Ser Cys Leu
145             150             155             160

Ile Ser Thr Gly Tyr Asn Leu Ser Ala Ser Pro Phe Gln Ala Thr Cys
            165             170             175

Asn Gln Ser Leu Leu Thr Tyr Ile Ser Thr Ser Val Ser Tyr Gln Ala
            180             185             190

Pro Asn Asn Thr Trp Leu Ala Cys Thr Ser Gly Leu Thr Arg Cys Ile
    195             200             205

Asn Gly Thr Glu Pro Gly Pro Leu Leu Cys Val Leu Val His Val Leu
210             215             220

Pro Gln Val Tyr Val Tyr Ser Gly Pro Glu Gly Arg Gln Leu Ile Ala
225             230             235             240

Pro Pro Glu Leu His Pro Arg Leu His Gln Ala Val Pro Leu Leu Val
            245             250             255

Pro Leu Leu Ala Gly Leu Ser Ile Ala Gly Ser Ala Ala Ile Gly Thr
            260             265             270

Ala Ala Leu Val Gln Gly Glu Thr Gly Leu Ile Ser Leu Ser Gln Gln
    275             280             285

Val Asp Ala Asp Phe Ser Asn Leu Gln Ser Ala Ile Asp Ile Leu His
290             295             300

Ser Gln Val Glu Ser Leu Ala Glu Val Val Leu Gln Asn Cys Arg Cys
```

72

```
        305                     310                     315                  320

   Leu Asp Leu Leu Phe Leu Ser Gln Gly Gly Leu Cys Ala Ala Leu Gly
                    325                 330                 335

   Glu Ser Cys Cys Phe Tyr Ala Asn Gln Ser Gly Val Ile Lys Gly Thr
                    340                 345                 350

   Val Lys Lys Val Arg Glu Asn Leu Asp Arg His Gln Gln Glu Arg Glu
                355                 360                 365

   Asn Asn Ile Pro Trp Tyr Gln Ser Met Phe Asn Trp Asn Pro Trp Leu
        370                 375                 380

   Thr Thr Leu Ile Thr Gly Leu Ala Gly Pro Leu Leu Ile Leu Leu Leu
   385                 390                 395                 400

   Ser Leu Ile Phe Gly Pro Cys Ile Leu Asn Ser Phe Leu Asn Phe Ile
                    405                 410                 415

   Lys Gln Arg Ile Ala Ser Val Lys Leu Thr Tyr Leu Lys Thr Gln Tyr
                420                 425                 430

   Asp Thr Leu Val Asn Asn
                435
```

```
<210> 139
<211> 62
<212> PRT
<213> Homo sapiens

<400> 139
Met Phe Cys Arg Asn Trp Arg Cys Glu Phe Met Met Leu Ser His Asn
 1               5                  10                  15

Thr Ala Val Met Ile Cys Ser Phe Ser Gln Asn Asp Phe His Ala Ala
            20                  25                  30

Leu Cys Cys Ser Ser Val Ser Glu Leu Pro Tyr Leu Phe Leu Val Cys
         35                  40                  45

Ser Thr Tyr Lys Cys Ser Cys His Ala Val Leu Phe Phe Cys
     50              55                  60
```

```
<210> 140
<211> 62
<212> PRT
<213> Homo sapiens

<400> 140
Met Phe Cys Arg Asn Trp Arg Cys Glu Phe Met Met Leu Ser His Asn
 1               5                  10                  15

Thr Ala Val Met Ile Cys Ser Phe Ser Gln Asn Asp Phe His Ala Ala
            20                  25                  30
```

```
Leu Cys Cys Ser Ser Val Ser Glu Leu Pro Tyr Leu Phe Leu Val Cys
        35                40                45

Ser Thr Tyr Lys Cys Ser Cys His Ala Val Leu Phe Phe Cys
    50                55                60
```

<210> 141
<211> 76
<212> PRT
<213> Homo sapiens

<400> 141
```
Ile Asn Phe Thr Tyr Lys Arg Leu Ser Leu Asp Phe Ile Tyr Ile Tyr
 1               5                10                15

Met Cys Val Cys Val Cys Val Cys Val Cys Val Cys Val Cys Val Tyr
            20                25                30

Leu Lys Arg Thr Cys Ala Ser Ile Lys Gly Asn Lys Met Arg Glu Tyr
        35                40                45

Ile Ile Asp Phe Val Lys Ser Lys Tyr Leu Asn Tyr Gly Phe Ser Ile
    50                55                60

Phe Lys Asn Ser Cys Ser Phe Cys Thr Tyr Phe Phe
65                70                75
```

<210> 142
<211> 42
<212> PRT
<213> Homo sapiens

<400> 142
```
Met Phe Leu Phe Ile Thr Phe Thr Ile Leu Ala Ile Phe Ile Ile Glu
 1               5                10                15

Pro Arg Asn Leu Arg Val Asp Leu Asn Leu Ile Lys Phe Gln Thr Ser
            20                25                30

Trp Pro Lys Thr Leu Val Glu Glu Gln Asn
        35                40
```

<210> 143
<211> 42
<212> PRT
<213> Homo sapiens

<400> 143
```
Met Phe Leu Phe Ile Thr Phe Thr Ile Leu Ala Ile Phe Ile Ile Glu
 1               5                10                15

Pro Arg Asn Leu Arg Val Asp Leu Asn Leu Ile Lys Phe Gln Thr Ser
            20                25                30
```

```
Trp Pro Lys Thr Leu Val Glu Glu Gln Asn
         35                  40
```

```
<210> 144
<211> 23
<212> PRT
<213> Homo sapiens

<400> 144
Ala Trp Ile Gln Cys Thr Leu Leu Leu Tyr Pro Arg Arg Thr Ser Gln
 1             5               10                  15

Gly Ile His Gln Val Pro Gly
            20
```

```
<210> 145
<211> 20
<212> PRT
<213> Homo sapiens

<400> 145
Leu Leu Met Arg Gln Pro Trp Val Gly Gln Gly Trp Gly Pro Val Val
 1             5               10                  15

Glu Glu Thr Cys
            20
```

```
<210> 146
<211> 322
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (131)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (185)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (218)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (220)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
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```
<222> (250)
<223> Xaa equals any of the naturally occurring L-amino acids


<220>
<221> SITE
<222> (312)
<223> Xaa equals any of the naturally occurring L-amino acids


<400> 146
Met Ala Leu Pro Pro Gly Pro Ala Ala Leu Arg His Thr Leu Leu Leu
 1               5              10             15

Leu Pro Ala Leu Leu Ser Ser Gly Trp Gly Glu Leu Glu Pro Gln Ile
            20             25             30

Asp Gly Gln Thr Trp Ala Glu Arg Ala Leu Arg Glu Asn Glu Arg His
        35             40             45

Ala Phe Thr Cys Arg Val Ala Gly Gly Pro Gly Thr Pro Arg Leu Ala
    50             55             60

Trp Tyr Leu Asp Gly Gln Leu Gln Glu Ala Ser Thr Ser Arg Leu Leu
 65             70             75             80

Ser Val Gly Gly Glu Ala Phe Ser Gly Gly Thr Ser Thr Phe Thr Val
            85             90             95

Thr Ala His Arg Ala Gln His Glu Leu Asn Cys Ser Leu Gln Asp Pro
        100            105            110

Arg Ser Gly Arg Ser Ala Asn Ala Ser Val Ile Leu Asn Val Gln Phe
        115            120            125

Lys Pro Xaa Ile Ala Gln Val Gly Ala Lys Tyr Gln Glu Ala Gln Gly
    130            135            140

Pro Gly Leu Leu Val Val Leu Phe Ala Leu Val Arg Ala Asn Pro Pro
145            150            155            160

Ala Asn Val Thr Trp Ile Asp Gln Asp Gly Pro Val Thr Val Asn Thr
            165            170            175

Ser Asp Phe Leu Val Leu Asp Ala Xaa Asn Tyr Pro Trp Leu Thr Asn
            180            185            190

His Thr Val Gln Leu Gln Leu Arg Ser Leu Ala His Asn Leu Ser Val
        195            200            205

Val Ala Thr Asn Asp Val Gly Val Thr Xaa Ala Xaa Leu Pro Ala Pro
    210            215            220

Gly Pro Ser Arg His Pro Ser Leu Ile Ser Ser Asp Ser Asn Asn Leu
225            230            235            240

Lys Leu Asn Asn Val Arg Leu Pro Arg Xaa Asn Met Ser Leu Pro Ser
            245            250            255

Asn Leu Gln Leu Asn Asp Leu Thr Pro Asp Ser Arg Ala Val Lys Pro
            260            265            270
```

Ala Asp Arg Gln Met Ala Gln Asn Asn Ser Arg Pro Glu Leu Leu Asp
    275   280   285

Pro Glu Pro Gly Gly Leu Leu Thr Ser Gln Gly Phe Ile Arg Leu Pro
    290   295   300

Val Leu Gly Tyr Ile Tyr Arg Xaa Ser Ser Val Ser Ser Asp Glu Ile
305   310   315   320

Trp Leu

<210> 147
<211> 322
<212> PRT
<213> Homo sapiens

<400> 147
Met Ala Leu Pro Pro Gly Pro Ala Ala Leu Arg His Thr Leu Leu Leu
    1   5   10   15

Leu Pro Ala Leu Leu Ser Ser Gly Trp Gly Glu Leu Glu Pro Gln Ile
            20   25   30

Asp Gly Gln Thr Trp Ala Glu Arg Ala Leu Arg Glu Asn Glu Arg His
        35   40   45

Ala Phe Thr Cys Arg Val Ala Gly Gly Pro Gly Thr Pro Arg Leu Ala
        50   55   60

Trp Tyr Leu Asp Gly Gln Leu Gln Glu Ala Ser Thr Ser Arg Leu Leu
65   70   75   80

Ser Val Gly Gly Glu Ala Phe Ser Gly Gly Thr Ser Thr Phe Thr Val
                85   90   95

Thr Ala His Arg Ala Gln His Glu Leu Asn Cys Ser Leu Gln Asp Pro
            100   105   110

Arg Ser Gly Arg Ser Ala Asn Ala Ser Val Ile Leu Asn Val Gln Phe
        115   120   125

Lys Pro Glu Ile Ala Gln Val Gly Ala Lys Tyr Gln Glu Ala Gln Gly
    130   135   140

Pro Gly Leu Leu Val Val Leu Phe Ala Leu Val Arg Ala Asn Pro Pro
145   150   155   160

Ala Asn Val Thr Trp Ile Asp Gln Asp Gly Pro Val Thr Val Asn Thr
                165   170   175

Ser Asp Phe Leu Val Leu Asp Ala Gln Asn Tyr Pro Trp Leu Thr Asn
            180   185   190

His Thr Val Gln Leu Gln Leu Arg Ser Leu Ala His Asn Leu Ser Val
    195   200   205

Val Ala Thr Asn Asp Val Gly Val Thr Ser Ala Ser Leu Pro Ala Pro

                                            220
                    215
      210
Gly Pro Ser Arg His Pro Ser Leu Ile Ser Ser Asp Ser Asn Asn Leu
                         230   235   240
225

Lys Leu Asn Asn Val Arg Leu Pro Arg Glu Asn Met Ser Leu Pro Ser
                   245   250   255

Asn Leu Gln Leu Asn Asp Leu Thr Pro Asp Ser Arg Ala Val Lys Pro
              260   265   270

Ala Asp Arg Gln Met Ala Gln Asn Asn Ser Arg Pro Glu Leu Leu Asp
         275   280   285

Pro Glu Pro Gly Gly Leu Leu Thr Ser Gln Gly Phe Ile Arg Leu Pro
    290   295   300

Val Leu Gly Tyr Ile Tyr Arg Val Ser Ser Val Ser Ser Asp Glu Ile
305   310   315   320

Trp Leu

<210> 148
<211> 25
<212> PRT
<213> Homo sapiens

<400> 148
Met Ile Ser Leu Leu Trp Thr Leu Lys Leu Phe Ser Arg Asn Leu Asp
1   5   10   15

Tyr Ser Gln Lys Arg Lys Ser Trp Cys
              20   25

<210> 149
<211> 25
<212> PRT
<213> Homo sapiens

<400> 149
Met Ile Ser Leu Leu Trp Thr Leu Lys Leu Phe Ser Arg Asn Leu Asp
1   5   10   15

Tyr Ser Gln Lys Arg Lys Ser Trp Cys
              20   25

<210> 150
<211> 18
<212> PRT
<213> Homo sapiens

<400> 150
Thr Lys Ser Ser Asp Phe Gly Gly Gly Cys Arg Asn Ala Ser Ser Ser

```
         1                5                      10                   15
Cys Cys
```

```
<210> 151
<211> 26
<212> PRT
<213> Homo sapiens

<400> 151
Gly Cys Phe Lys Ile Val Leu Phe Phe Lys Leu Val Ile Phe Ala Lys
  1               5                      10                   15

Leu Phe Val Phe Val Val Ser Ile Asn Met
            20                  25
```

```
<210> 152
<211> 18
<212> PRT
<213> Homo sapiens

<400> 152
Thr Lys Ser Ser Asp Phe Gly Gly Gly Cys Arg Asn Ala Ser Ser Ser
  1               5                      10                   15

Cys Cys
```

```
<210> 153
<211> 143
<212> PRT
<213> Homo sapiens

<400> 153
Met Val Cys Gly Trp Ile Ile Tyr Gly Ser Phe Ile Tyr Leu Ser Ser
  1               5                      10                   15

His Cys Ala Thr Thr Phe Lys Glu Asp Gly Leu Trp Thr Tyr Leu Asn
              20                  25                  30

Gln Ile Val Ala Cys Ser Pro Trp Val Leu Tyr Ile Leu Met Leu Ala
                35                  40                  45

Thr Phe His Phe Ser Trp Ser Thr Phe Leu Leu Leu Asn Gln Leu Phe
          50                  55                  60

Gln Ile Ala Phe Leu Gly Leu Thr Ser His Glu Arg Ile Ser Leu Gln
    65                  70                  75                  80

Lys Gln Ser Lys His Met Lys Gln Thr Leu Ser Leu Arg Lys Thr Pro
                85                  90                  95

Tyr Asn Leu Gly Phe Met Gln Asn Leu Ala Asp Phe Phe Gln Cys Gly
```

```
                100                    105                    110
```

Cys Phe Gly Leu Val Lys Pro Cys Val Val Asp Trp Thr Ser Gln Tyr
        115   120   125

Thr Met Val Phe His Pro Ala Arg Glu Lys Val Leu Arg Ser Val
    130   135   140

<210> 154
<211> 101
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (91)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (93)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (99)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 154
Trp Glu Ser Leu Gly Leu Met Phe Leu Cys Gly Pro His Leu Thr Arg
  1   5   10   15

Leu Leu Leu Phe Leu Phe Thr Leu Gly Phe Cys Ala Phe Ile Asn Ile
            20   25   30

Val Leu Ser Phe Pro Leu Val Cys Ile Pro Phe Cys Leu Gly Arg Leu
        35   40   45

Tyr Phe Leu Leu Leu Thr Glu Lys Pro His Gln Glu Ala Cys Pro Gly
    50   55   60

Asp Glu Leu Gly Thr Gly His Leu His Ile Gly Leu Gly Ala Val Arg
 65   70   75   80

Leu Gln Gly Pro Asp Asn Met Arg Asn Glu Xaa Ser Xaa Ile Val Val
                85   90   95

Gly Asp Xaa Gly Leu
            100

<210> 155
<211> 35
<212> PRT
<213> Homo sapiens

<400> 155
```

Met Leu Asn Asp Gly Lys Val Trp Val Ser Cys Phe Cys Val Val Leu
1               5                   10                  15

Thr Ser Leu Asp Phe Cys Ser Phe Cys Ser Leu Trp Ala Ser Val Leu
                20                  25                  30

Ser Leu Ile
            35


<210> 156
<211> 114
<212> PRT
<213> Homo sapiens

<400> 156
Gly Pro Arg Arg Leu Ser Gly Thr His Ser Arg Gly Ser Ser Pro Asp
1               5                   10                  15

Pro Cys Ser Cys Val Val Trp Ala Ser Ala Asn Ser Trp Ala Thr Cys
                20                  25                  30

Val Tyr Leu Glu Pro Gly Ser Pro Leu Ser Ser Phe Pro Cys Ala Tyr
        35                  40                  45

Ser Gly Thr Cys Leu Val Arg Val Trp Gln Glu Asn Gly Ala Phe Asn
        50                  55                  60

Asn Leu Pro Ser Phe Ile Pro Trp Ser Leu Leu His Ala Arg Thr Cys
65                  70                  75                  80

Ala His Leu Phe Gly Ala Leu Ser His Leu Ile Asp Ser Arg Pro Gly
                85                  90                  95

Ala Val Leu Thr Pro Val Ile Pro Ala Leu Trp Glu Asp Glu Ala Gly
            100                 105                 110

Gly Ser


<210> 157
<211> 26
<212> PRT
<213> Homo sapiens

<400> 157
Met Cys Val Ser Pro Val Ser Val Cys Pro Phe Leu Pro Ser Leu His
1               5                   10                  15

Phe Ile Asn Asn Trp Cys Asn Val Ser Ser
                20                  25


<210> 158
<211> 106
<212> PRT

81

<213> Homo sapiens

<220>
<221> SITE
<222> (36)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 158
Gly Ser Asp Gly Pro Arg Glu Arg Ala Pro Val Ala Trp Leu Ser His
1                 5                   10                  15

Ser Ile Leu Ser Leu Ile Leu Asn Lys Tyr Phe Leu Trp Gly Phe Phe
            20                  25                  30

Phe Phe Leu Xaa Ala Val Val Cys Phe Lys Leu Thr Thr Trp Lys Lys
        35                  40                  45

His Leu Gly Tyr Leu Trp Phe Ser Cys Leu Val Pro Ala Ser Thr Pro
    50                  55                  60

Thr Pro Phe Glu Ser Gly Asp Ser Phe Phe Cys Val Glu Thr Arg Trp
65                  70                  75                  80

Pro Arg Gln Glu Val Lys Ala Ala Ile Arg Lys Ala Leu Gly Thr Leu
                85                  90                  95

Val Pro Val Ala Arg Leu Gln Val Thr Ser
            100                 105


<210> 159
<211> 201
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (10)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (19)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 159
Leu Ser Ser Leu Leu Pro Gln Arg Leu Xaa Glu Pro Ser Ser Ser Ser
1                 5                   10                  15

Pro Gly Xaa Arg Thr Trp Gln Leu Ser Gln Lys Ser Arg Gly Pro Ser
            20                  25                  30

Arg Ala Ser Ser Met Ser Val Leu Asn Ser Leu Arg Ser Ser Ser Trp
        35                  40                  45

Trp Pro Arg Leu His Thr His Thr Ser Met Pro Glu Ser Pro Val Lys
    50                  55                  60

Arg Arg Cys Leu Pro Gly Val Phe Ser Leu Leu Ser Gly Ala Pro Cys

82

```
     65                70                 75                  80
```

Ser Glu Leu Ser Ser Phe Ser Ser Ser Ser Leu His Ser Ala Ser Leu
                85   90   95

Ser Arg Lys Ala Pro Gly Ser Ser Ser Pro Arg Pro Ala Thr Glu Pro
            100   105   110

Leu Gly Ser Ile Pro Gly Ala Leu Val Ala Ala Arg Ser Thr Gly Arg
            115   120   125

Ser Glu Gly Ser Gly Ser Ala Met Leu Gly Gly Leu Val Leu Leu Leu
            130   135   140

Leu Gly Ser Asp Lys Gly Leu Leu Cys Ala Pro Trp Asp Pro Leu Val
145   150   155   160

Gly Ser Met Pro Gly Gly Leu Pro Pro Ala Gly Pro His Cys Gly Gly
                165   170   175

Ser Ser Cys Cys Cys Cys Ser Trp Lys Ala Leu Tyr Gly Gly Gly Gly
                180   185   190

Val Gly Gly Arg Phe Thr Thr Ser Ser
            195   200

<210> 160
<211> 52
<212> PRT
<213> Homo sapiens

<400> 160
Met Ala Leu Leu Leu Leu Gln Ala Leu Pro Ser Pro Leu Ser Ala Arg
 1   5   10   15

Ala Glu Pro Pro Gln Asp Lys Glu Ala Cys Val Gly Thr Asn Asn Gln
            20   25   30

Ser Tyr Ile Cys Asp Thr Gly His Cys Cys Gly Gln Ser Gln Cys Cys
         35   40   45

Lys Leu Leu Leu
      50

<210> 161
<211> 118
<212> PRT
<213> Homo sapiens

<400> 161
Leu Leu Leu Leu Gln Ala Leu Pro Ser Pro Leu Ser Ala Arg Ala Glu
 1   5   10   15

Pro Pro Gln Asp Lys Glu Ala Cys Val Gly Thr Asn Asn Gln Ser Tyr
            20   25   30

Ile Cys Asp Thr Gly His Cys Cys Gly Gln Ser Gln Cys Cys Asn Tyr
        35   40   45

Tyr Tyr Glu Leu Trp Trp Phe Trp Leu Val Trp Thr Ile Ile Ile Ile
    50   55   60

Leu Ser Cys Cys Cys Val Cys His His Arg Arg Ala Lys His Arg Leu
65   70   75   . 80

Gln Ala Gln Gln Arg Gln His Glu Ile Asn Leu Ile Ala Tyr Arg Glu
            85   90   95

Ala His Asn Tyr Ser Ala Leu Pro Phe Tyr Phe Arg Phe Leu Pro Asn
        100   105   110

Tyr Leu Leu Pro Pro Leu
    115

<210> 162
<211> 363
<212> PRT
<213> Homo sapiens

<400> 162
Met Glu Arg Arg Arg Leu Leu Gly Gly Met Ala Leu Leu Leu Leu Gln
1   5   10   15

Ala Leu Pro Ser Pro Leu Ser Ala Arg Ala Glu Pro Pro Gln Asp Lys
            20   25   30

Glu Ala Cys Val Gly Thr Asn Asn Gln Ser Tyr Ile Cys Asp Thr Gly
        35   40   45

His Cys Cys Gly Gln Ser Gln Cys Cys Asn Tyr Tyr Tyr Glu Leu Trp
    50   55   60

Trp Phe Trp Leu Val Trp Thr Ile Ile Ile Ile Leu Ser Cys Cys Cys
65   70   75   80

Val Cys His His Arg Arg Ala Lys His Arg Leu Gln Ala Gln Gln Arg
            85   90   95

Gln His Glu Ile Asn Leu Ile Ala Tyr Arg Glu Ala His Asn Tyr Ser
        100   105   110

Ala Leu Pro Phe Tyr Phe Arg Phe Leu Pro Asn Tyr Leu Leu Pro Pro
    115   120   125

Tyr Glu Glu Val Val Asn Arg Pro Pro Thr Pro Pro Pro Pro Tyr Ser
130   135   140

Ala Phe Gln Leu Gln Gln Gln Gln Leu Leu Pro Pro Gln Cys Gly Pro
145   150   155   160

Ala Gly Gly Ser Pro Pro Gly Ile Asp Pro Thr Arg Gly Ser Gln Gly
            165   170   175

Ala Gln Ser Ser Pro Leu Ser Glu Pro Ser Arg Ser Ser Thr Arg Pro

                    180   185   190

    Pro Ser Ile Ala Asp Pro Asp Pro Ser Asp Leu Pro Val Asp Arg Ala
            195   200   205

    Ala Thr Lys Ala Pro Gly Met Glu Pro Ser Gly Ser Val Ala Gly Leu
        210   215   220

    Gly Glu Leu Asp Pro Gly Ala Phe Leu Asp Lys Asp Ala Glu Cys Arg
    225   230   235   240

    Glu Glu Leu Leu Lys Asp Asp Ser Ser Glu His Gly Ala Pro Asp Ser
                245   250   255

    Lys Glu Lys Thr Pro Gly Arg His Arg Arg Phe Thr Gly Asp Ser Gly
                260   265   270

    Ile Glu Val Cys Val Cys Asn Arg Gly His His Asp Asp Asp Leu Lys
            275   280   285

    Glu Val Asn Thr Leu Ile Asp Asp Ala Leu Asp Gly Pro Leu Asp Phe
        290   295   300

    Cys Asp Ser Cys His Val Arg Pro Pro Gly Asp Glu Glu Glu Gly Leu
    305   310   315   320

    Cys Gln Pro Ser Glu Glu Gln Ala Arg Glu Pro Gly His Pro His Leu
                325   330   335

    Pro Arg Pro Pro Ala Cys Leu Leu Leu Asn Thr Ile Asn Glu Gln Asp
                340   345   350

    Ser Pro Asn Ser Gln Ser Asn Ser Ser Pro Ser
                355   360

    <210> 163
    <211> 199
    <212> PRT
    <213> Homo sapiens

    <220>
    <221> SITE
    <222> (2)
    <223> Xaa equals any of the naturally occurring L-amino acids

    <220>
    <221> SITE
    <222> (6)
    <223> Xaa equals any of the naturally occurring L-amino acids

    <220>
    <221> SITE
    <222> (14)
    <223> Xaa equals any of the naturally occurring L-amino acids

    <220>
    <221> SITE
    <222> (34)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (51)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 163
Gln Xaa Lys Pro Pro Xaa Pro Ala Ala Pro Ala Ala Pro Xaa Ala Pro
1   5   10   15

Ala Pro Leu Glu Lys Pro Ile Arg Ser His Glu Ala Thr Gly Gly Gly
            20   25   30

Glu Xaa Ala Cys Gly Val Thr Gly Ala Ser Thr Pro Glu Gly Thr Ala
    35   40   45

Pro Pro Xaa Pro Ala Ala Pro Ala Pro Pro Lys Gly Glu Lys Glu Gly
    50   55   60

Gln Arg Pro Thr Gln Pro Val Tyr Gln Ile Gln Asn Arg Gly Met Gly
65   70   75   80

Thr Ala Ala Pro Ala Ala Met Asp Arg Glu Leu Gly Leu Gly Ser Thr
                85   90   95

Arg Leu Gly Thr Gly Val Ser Ser Gln Ile Leu Thr Ala Ser Ser Val
            100   105   110

Ser Cys Phe Leu Gln Ser Pro Ala Val Val Gly Gln Ala Lys Leu Leu
    115   120   125

Pro Pro Glu Arg Met Lys His Ser Ile Lys Leu Val Asp Asp Gln Met
    130   135   140

Asn Trp Cys Asp Ser Ala Ile Glu Val Pro Arg Gly Pro Ala Leu Pro
145   150   155   160

Glu Leu Pro His Ile Leu His Pro Leu Ile Phe His Leu Ser Val Gly
                165   170   175

Asn Thr Arg Leu Glu Gly Phe Glu Ala Thr Tyr Ser Ser Glu Arg Gly
            180   185   190

Trp Tyr Gln Asn Ile Leu Thr
        195

<210> 164
<211> 21
<212> PRT
<213> Homo sapiens

<400> 164
Met Lys Asn Ser Phe Phe Thr Val Ser Trp Ala Leu Thr Cys Ser Phe
1   5   10   15

Ser Trp Ala Thr Val
            20

<210> 165
<211> 21
<212> PRT
<213> Homo sapiens

<400> 165
Met Lys Asn Ser Phe Phe Thr Val Ser Trp Ala Leu Thr Cys Ser Phe
 1   5   10   15

Ser Trp Ala Thr Val
             20

<210> 166
<211> 39
<212> PRT
<213> Homo sapiens

<400> 166
Met Pro Leu Phe Arg Thr Phe Lys Gln Leu Gly Leu Phe Leu Phe Leu
 1   5   10   15

Ile Ile Pro Ile Ile Cys Ser Ser Leu Pro Pro Leu Gly Pro Val Gln
             20   25   30

Ser Phe Leu Gly Cys Leu Tyr
         35

<210> 167
<211> 50
<212> PRT
<213> Homo sapiens

<400> 167
Met Leu Leu Leu Val Val Thr Leu Val Asn Leu Ser Ile Tyr Lys Leu
 1   5   10   15

Ile Lys Leu Val Thr Ala Leu Ser Lys Lys Leu Gly Ala Lys Gly Val
             20   25   30

Leu Lys Asn Ala His Phe Met Arg Cys Asn Cys Gly Glu Met Arg Thr
         35   40   45

Arg Ser
    50

<210> 168
<211> 2
<212> PRT
<213> Homo sapiens

<400> 168

Leu Leu
  1

<210> 169
<211> 69
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (6)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (13)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (51)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 169
Trp Tyr Gln Gly Lys Xaa Asp Leu Lys Gly Leu Gly Xaa Val Leu Asp
  1   5   10   15

Gly Ser Asp Gly Met Ala Gly Gly Ile Pro Glu Gly Met Ala Phe Thr
            20   25   30

Leu Tyr Leu Gly Ile Trp Leu Ser Ser Pro Phe Pro Asp Cys Cys Ile
        35   40   45

Ala Phe Xaa Phe Ala Tyr Ser Ser Ser Pro Leu Ser Ser Gly Asp Thr
    50   55   60

Phe Gln Gly Pro Gln
 65

<210> 170
<211> 135
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (33)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (129)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 170
Ala Lys Met Pro Trp Thr Cys Ser Val Ser Asp Pro Thr Ser Cys Asp

```
         1                5                    10           '           15

Ser Gln Ala Gln Lys Met Pro Gly Val Arg Ala Ser Arg Gln Pro Gly
            20                  25                30

Xaa Gly Arg Gln Cys Leu Leu Leu Leu His Gln Val Gln Gly Ile Trp
            35                  40                45

Leu Lys Ala Cys Ile Phe Pro Gly His Lys Leu Pro Glu Pro Leu Lys
            50                  55                60

Trp Glu Ala Arg Gln Phe Gln Thr Asn Leu Phe Ser Thr His His Ser
    65                  70                  75                  80

Thr Phe Lys Val Cys Leu Leu Leu Leu Pro Val His Pro Pro Ser Leu
                85                  90                      95.

Gln Phe Phe His Ser Leu Thr Ser Glu Arg Val Pro Gly Gly Ser Met
                100                 105                 110

Val Asn Lys Leu Thr Cys Met Leu Gln Lys Lys Lys Lys Lys Lys Ile
        115                 120                 125

Xaa Ala Val Arg Lys Gly Ile
    130             135
```

```
<210> 171
<211> 50
<212> PRT
<213> Homo sapiens

<400> 171
Met Leu Leu Leu Val Val Thr Leu Val Asn Leu Ser Ile Tyr Lys Leu
    1                5                    10                15

Ile Lys Leu Val Thr Ala Leu Ser Lys Lys Leu Gly Ala Lys Gly Val
            20                  25                30

Leu Lys Asn Ala His Phe Met Arg Cys Asn Cys Gly Glu Met Arg Thr
            35                  40                45

Arg Ser
    50
```

```
<210> 172
<211> 77
<212> PRT
<213> Homo sapiens

<400> 172
Met Ala Thr Thr Gly Thr Lys Pro Thr Ser Cys Trp Cys Trp Phe Leu
    1                5                    10                15

Leu Ala Met Cys Trp Phe Val Gln Leu Arg Thr Glu Trp Glu Arg Ala
            20                  25                30
```

```
Phe Leu Phe Val Pro Ile Ala Arg Glu Pro Gly Arg Leu Cys Arg Phe
        35              .           40                      45

Ser Gly Asn Lys Gln Leu Asn Gly Leu Ala Val Ala Leu Gln Ala Phe
        50              55                      60

Arg Phe Ala Lys Asn Lys Thr Ser Gln Lys Arg Cys Ala
65                  70              .       75
```

<210> 173
<211> 77
<212> PRT
<213> Homo sapiens

<400> 173
```
Met Ala Thr Thr Gly Thr Lys Pro Thr Ser Cys Trp Cys Trp Phe Leu
    1           .   5           .           10          .       15

Leu Ala Met Cys Trp Phe Val Gln Leu Arg Thr Glu Trp Glu Arg Ala
    .   .       20          .       25                      30

Phe Leu Phe Val Pro Ile Ala Arg Glu Pro Gly Arg Leu Cys Arg Phe
    .       35              40                      45

Ser Gly Asn Lys Gln Leu Asn Gly Leu Ala Val Ala Leu Gln Ala Phe
        50              55                      60
        \

Arg Phe Ala Lys Asn Lys Thr Ser Gln Lys Arg Cys Ala          .
65                  70              75
```

<210> 174
<211> 56
<212> PRT
<213> Homo sapiens

<400> 174
```
Cys Asp Val Lys Pro Ala Asp Val Lys Asp Ile Gly Gly Thr Val Glu
 .1     .       5                   10                      15

Ala Ser Cys Met Asn Phe Ser Trp Pro Ala Pro Thr Ala Gln Val His   .
                20              25              30

Thr Arg Lys Arg Arg Val Trp Ala Cys Leu Arg Val Asp Val Ser Ser
        35                  40                      45

Glu Val Arg Pro Gly Lys Ala Leu
        50                  55
```

<210> 175
<211> 68
<212> PRT
<213> Homo sapiens .

<220>

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<221> SITE
<222> (44)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (57)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 175
Met Ala Gln Ser Arg Val Leu Leu Leu Leu Leu Leu Leu Pro Pro Gln
 1               5                  10                  15

 Leu Ala Pro Gly Thr Cys Ala Cys Arg Glu Gly Pro Arg Ile Trp Pro
             20                  25                  30

 Asn Gly Gly His Ser Leu Ser Pro Glu Glu Asn Xaa Leu Arg Lys Lys
             35                  40                  45

 Ser Arg Leu Leu Leu Ile Glu Ala Xaa Lys Lys Pro Gly Ala Trp Ala
      50                  55                  60

 Gln Ala Ala Val
  65
```

```
<210> 176
<211> 85
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (26)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 176
Met Ala Gln Ser Arg Val Leu Leu Leu Leu Leu Leu Leu Pro Pro Gln
 1               5                  10                  15

 Leu His Leu Gly Pro Val Leu Ala Val Xaa Ala Pro Gly Phe Gly Arg
             20                  25                  30

 Ser Gly Gly His Ser Leu Ser Pro Glu Glu Asn Glu Phe Ala Glu Glu
             35                  40                  45

 Glu Pro Val Leu Val Leu Ser Pro Glu Glu Pro Gly Pro Gly Pro Ala
      50                  55                  60

 Ala Val Ser Cys Pro Arg Asp Cys Ala Cys Ser Gln Glu Gly Val Val
  65              70                  75                  80

 Asp Cys Gly Gly Tyr
              85
```

```
<210> 177
<211> 14
```

```
<212> PRT
<213> Homo sapiens

<400> 177
Met Ile Tyr Gln Ile Tyr Gly Ile Ile Cys Ser Leu Phe Pro
  1               5                   10



<210> 178
<211> 31
<212> PRT
<213> Homo sapiens

<400> 178
Gly Pro Phe Cys Asp Val Thr Thr Leu His Leu Pro Gly Leu Leu Cys
  1               5                   10                  15

Thr Gln Cys Ser Leu Asp Pro Val Asp Leu Tyr Leu Trp Arg Ser
            20                  25                  30



<210> 179
<211> 14
<212> PRT
<213> Homo sapiens

<400> 179
Met Ile Tyr Gln Ile Tyr Gly Ile Ile Cys Ser Leu Phe Pro
  1               5                   10



<210> 180
<211> 71
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (71)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 180
Thr Met Gly Pro Gly Asp Arg His Arg Leu Pro Val Tyr Leu Gly His
  1               5                   10                  15

Cys Leu Gly Cys Leu Glu Ser Gly Leu Leu Ala Gln Ile Leu Pro Leu
            20                  25                  30

Leu Gly Gln Gly Arg Pro Phe Met Asp Ser Leu Ile Arg Val Ala Ala
        35                  40                  45

Glu Arg Arg Ala Gly Gln Val Leu Lys Gly Thr Leu Lys Arg Phe Ser
      50                  55                  60

Glu Arg Gln Gly Arg Arg Xaa
 65                 70
```

<210> 181
<211> 204
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (1)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (5)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (8)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 181
Xaa Pro Ser Leu Xaa Gly Thr Xaa Ala Gly Gly Ser Thr Ala Val Ala
 1   5   10   15

Ala Ala Leu Glu Leu Val Asp Pro Pro Gly Cys Arg Asn Ser Ala Arg
            20   25   30

Ala Ala Ala Glu Leu Ser Leu Leu Glu Lys Ser Leu Gly Leu Ser Lys
        35   40   45

Gly Asn Lys Tyr Ser Ala Gln Gly Glu Arg Gln Ile Pro Val Leu Gln
    50   55   60

Thr Asn Asn Gly Pro Ser Leu Thr Gly Leu Thr Thr Ile Ala Ala His
65   70   75   80

Leu Val Lys Gln Ala Asn Lys Glu Tyr Leu Leu Gly Ser Thr Ala Glu
                85   90   95

Glu Lys Ala Ile Val Gln Gln Trp Leu Glu Tyr Arg Val Thr Gln Val
            100   105   110

Asp Gly His Ser Ser Lys Asn Asp Ile His Thr Leu Leu Lys Asp Leu
        115   120   125

Asn Ser Tyr Leu Glu Asp Lys Val Tyr Leu Thr Gly Tyr Asn Phe Thr
    130   135   140

Leu Ala Asp Ile Leu Leu Tyr Tyr Gly Leu His Arg Phe Ile Val Asp
145   150   155   160

Leu Thr Val Gln Glu Lys Glu Lys Tyr Leu Asn Val Ser Arg Trp Phe
                165   170   175

Cys His Ile Gln His Tyr Pro Gly Ile Arg Gln His Leu Ser Ser Val
            180   185   190

Val Phe Ile Lys Asn Arg Leu Tyr Thr Asn Ser His

                195   200

<210> 182
<211> 54
<212> PRT
<213> Homo sapiens

<400> 182
Met Thr Ser Pro Leu Ala Arg Leu Leu Leu Pro Phe Trp Cys His Thr
 1   5   10   15

Leu Gly Thr Met Ala Leu Gly Thr Pro Asn Pro Gly Ala Met Ala Trp
            20   25   30

Gly Ala Val Gly Glu Pro Asn Pro Gly Ala Trp Thr Val Pro Leu Gly
        35   40   45

Ala Phe Leu Ala Gly Arg
    50

<210> 183
<211> 54
<212> PRT
<213> Homo sapiens

<400> 183
Met Thr Ser Pro Leu Ala Arg Leu Leu Leu Pro Phe Trp Cys His Thr
 1   5   10   15

Leu Gly Thr Met Ala Leu Gly Thr Pro Asn Pro Gly Ala Met Ala Trp
            20   25   30

Gly Ala Val Gly Glu Pro Asn Pro Gly Ala Trp Thr Val Pro Leu Gly
        35   40   45

Ala Phe Leu Ala Gly Arg
    50

<210> 184
<211> 1
<212> PRT
<213> Homo sapiens

<400> 184
Ser
 1

<210> 185
<211> 3
<212> PRT
<213> Homo sapiens

<400> 185
Leu Leu Cys
  1

<210> 186
<211> 1
<212> PRT
<213> Homo sapiens

<400> 186
Ser
  1

<210> 187
<211> 5
<212> PRT
<213> Homo sapiens

<400> 187
Ala Gly Thr Trp Ser
  1   5

<210> 188
<211> 45
<212> PRT
<213> Homo sapiens

<400> 188
Met Ala Gly Val Trp Asn Thr Ile Ala Leu Trp Phe Leu Ser Val Phe
  1   5   10   15

Gly Val Ile Ser Ala Pro Thr Thr Gly Thr Ser Pro Thr Ser Cys Arg
             20   25   30

Cys Val Gly Pro Arg Pro Pro Gly Cys Gly Pro Ala Gly
         35   40   45

<210> 189
<211> 46
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (21)
<223> Xaa equals any of the naturally occurring L-amino acids.

<400> 189
Leu Ile Asn Val Thr Asn Val Gly Ile Ile Leu Ala Val Ser Gln Pro
  1   5   10   15

Leu Asp Asp Ile Xaa Glu Phe Ile Ile Glu Lys Arg Ser Asp Tyr Asn

```
                 20                    25                   30

    Lys Tyr Arg Lys Glu Asn Met Trp Leu Pro Leu Asn Pro Tyr
            35                   40                   45
```

<210> 190
<211> 304
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (15)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (30)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (32)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (187)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 190

```
Met Leu Gln Phe Gln Arg Thr Trp Lys Tyr Lys Gly Glu Phe Xaa Leu
 1               5                   10                   15

His Gln Gly Asn Ala Glu Arg His Phe Met Gln Val Thr Xaa Val Xaa
            20                   25                   30

Glu Ile Ser Thr Gly Lys Arg Asp Asn Glu Phe Ser Asn Ser Gly Arg
        35                   40                   45

Ser Ile Pro Leu Lys Ser Val Phe Leu Thr Gln Gln Lys Val Pro Thr
        50                   55                   60

Ile Gln Gln Val His Lys Phe Asp Ile Tyr Asp Lys Leu Phe Pro Gln
65                   70                   75                   80

Asn Ser Val Ile Ile Glu Tyr Lys Arg Leu His Ala Glu Lys Glu Ser
                85                   90                   95

Leu Ile Gly Asn Glu Cys Glu Glu Phe Asn Gln Ser Thr Tyr Leu Ser
            100                  105                  110

Lys Asp Ile Gly Ile Pro Pro Gly Glu Lys Pro Tyr Glu Ser His Asp
        115                  120                  125

Phe Ser Lys Leu Leu Ser Phe His Ser Leu Phe Thr Gln His Gln Thr
        130                  135                  140
```

```
Thr His Phe Gly Lys Leu Pro His Gly Tyr Asp Glu Cys Gly Asp Ala
145               150           155                   160

Phe Ser Cys Tyr Ser Phe Phe Thr Gln Pro Gln Arg Ile His Ser Gly
                165               170                   175

Glu Lys Pro Tyr Ala Cys Asn Asp Cys Gly Xaa Ala Phe Ser Pro Thr
                180               185                   190

Ser Phe Ser Val Asn Ile Lys Glu Leu Ile Leu Gly Arg Asn Leu Met
            195               200               205

Asn Val Arg Asn Val Thr Lys Leu Ser Asp Arg Val Leu Thr Leu Leu
        210               215               220

Asn Ile Arg Gly Ser Thr Leu Glu Arg Asn Arg Leu Arg Ala Met Asn
225               230               235                   240

Val Gly Arg Pro Leu Ala Val Met Pro Ser Leu Leu Asn Ile Arg Glu
            245               250               255

Phe Thr Gln Val Arg Asn His Met Asn Val Lys Asn Val Ile Lys Pro
            260               265               270

Ser Asp Arg Val Leu Thr Leu Ile Asn Ile Arg Gly Phe Thr Leu Glu
        275               280               285

Arg Asn Pro Met Asn Val Ile Ser Val Glu Lys Pro Ser Ala Asp Ala
290               295               300
```

<210> 191
<211> 336
<212> PRT
<213> Homo sapiens

<400> 191
```
Met Asp Thr Met Asn Val Val Met Pro Leu Ala Val Thr His Ser Leu
  1           5               10                   15

Leu Asn Leu Arg Glu Phe Thr Val Val Glu Lys Pro Tyr Ala Cys Asn
            20               25                   30

Asp Cys Gly Lys Ala Phe Ser His Asp Phe Phe Leu Ser Glu His Gln
            35               40               45

Arg Thr His Ile Gly Glu Lys Pro Tyr Glu Cys Lys Glu Cys Asn Lys
        50               55               60

Ala Phe Arg Gln Ser Ala His Leu Ala Gln His Gln Arg Ile His Thr
65               70               75                   80

Gly Glu Lys Pro Phe Ala Cys Asn Glu Cys Gly Lys Ala Phe Ser Arg
                85               90                   95

Tyr Ala Phe Leu Val Glu His Gln Arg Ile His Thr Gly Glu Lys Pro
```

```
            100                     105                     110

Tyr Glu Cys Lys Glu Cys Asn Lys Ala Phe Arg Gln Ser Ala His Leu
        115                     120                     125

Asn Gln His Gln Arg Ile His Thr Gly Glu Lys Pro Tyr Glu Cys Asn
        130                     135                     140

Gln Cys Gly Lys Ala Phe Ser Arg Arg Ile Ala Leu Thr Leu His Gln
145                     150                     155                     160

Arg Ile His Thr Gly Glu Lys Pro Phe Lys Cys Ser Glu Cys Gly Lys
                165                     170                     175

Thr Phe Gly Tyr Arg Ser His Leu Asn Gln His Gln Arg Ile His Thr
                180                     185                     190

Gly Glu Lys Pro Tyr Glu Cys Ile Lys Cys Gly Lys Phe Phe Arg Thr
        195                     200                     205

Asp Ser Gln Leu Asn Arg His His Arg Ile His Thr Gly Glu Arg Pro
210                     215                     220

Phe Glu Cys Ser Lys Cys Gly Lys Ala Phe Ser Asp Ala Leu Val Leu
225                     230                     235                     240

Ile His His Lys Arg Ser His Ala Gly Glu Lys Pro Tyr Glu Cys Asn
                245                     250                     255

Lys Cys Gly Lys Ala Phe Ser Cys Gly Ser Tyr Leu Asn Gln His Gln
        260                     265                     270

Arg Ile His Thr Gly Glu Lys Pro Tyr Glu Cys Ser Glu Cys Gly Lys
        275                     280                     285

Ala Phe His Gln Ile Leu Ser Leu Arg Leu His Gln Arg Ile His Ala
        290                     295                     300

Gly Glu Lys Pro Tyr Lys Cys Asn Glu Cys Gly Asn Asn Phe Ser Cys
305                     310                     315                     320

Val Ser Ala Leu Arg Arg His Gln Arg Ile His Asn Arg Glu Thr Leu
                325                     330                     335
```

<210> 192
<211> 54
<212> PRT
<213> Homo sapiens

<400> 192
```
Leu Ala Ala Thr Arg Lys Phe Phe Leu Ser Ser His Ser Ser Ser Cys
  1               5                   10                  15

Lys Lys Gly Ala Met Ser Gln Lys Glu Ala Pro Phe His Arg Gln Arg
            20                  25                  30
```

98

```
     Leu His Arg Glu Arg Gly Asn Arg Arg Leu Gly Asn Gly Gly Glu Trp
              35                      40              ·        45

 ·Gly Arg Asn Trp Val Gln
       50



     <210> 193
    .<211> 27
     <212> PRT
     <213> Homo sapiens

     <400> 193
     Met His Gln Leu Phe Gly Leu Phe Val Thr Leu Met Phe Ala Ser Val
       1             5                   10              .      15

     Gly Gly Gly Leu Gly Gly Ile Ile Leu Val Leu
                   20                  25



     <210> 194 ·
     <211> 106
     <212> PRT
     <213> Homo sapiens

     <400> 194
     Met Pro Gly Val Leu Gly Ala Leu Leu Gly Val Leu Val Ala Gly Leu
       1             5                   10                    15

     Ala Thr His Glu Ala Tyr Gly Asp Gly Leu Glu Ser Val Phe Pro Leu
                   20                  25                   30

     Ile Ala Glu Gly Gln Arg Ser Ala Thr Ser Gln Ala Met His Gln Leu
               35                  40                   45

     Phe Gly Leu Phe Val Thr Leu Met Phe Ala Ser Val Gly Gly Gly Leu
           50                  55                   60

     Gly Gly Ile Ile Leu Val Leu Cys Leu Leu Asp Pro Cys Ala Leu Trp
      65                  70                   75                   80

     His Trp Val Ala Pro Ser Ser Met Val Gly Gly Arg Glu Ala Ser Gln
                       85                   90                   95

     Ile Leu Pro Tyr.His His Gln Gly Ser Cys
                   100                  105



     <210> 195
     <211> 60
     <212> PRT
     <213> Homo sapiens

     <220>
     <221> SITE
     <222> (3)
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (17)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 195
Asn Leu Xaa Cys Cys Glu Pro Leu Lys Gly Thr Glu Ile Val His Leu
 1               5                  10                      15

Xaa Ser Ser Asp Phe Lys Ala Val Ala Cys Arg Cys Ser Gln Leu Asn
            20              25                  30

Lys Ala Leu Pro Ser Thr Thr Leu Arg Gly Phe Val Cys Gly Ser Ser
        35              40                  45

Cys Tyr Ile Ser Trp Phe Pro Asn Gln Glu Thr Arg
    50              55              60
```

```
<210> 196
<211> 82
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (26)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (28)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 196
Pro Gly Asn Glu Val Thr Asp Gly Gln Pro Arg Gln Pro Leu Arg Arg
 1               5                  10                      15

Leu Arg Leu Pro Cys Gly Ala Ser Leu Xaa Arg Xaa Pro Ala Ser Pro
            20              25                  30

Ser Asp Ala Ile Gln Arg Ala Leu Pro Gly Arg Lys Leu Pro Arg Trp
        35              40                  45

Asn Ala Ser Pro Glu Gln Arg Val Ala Val Pro Cys Gly Gly Leu Thr
    50              55                  60

Gln Trp Leu Asn Thr Gly Lys Glu Leu Ala Leu Gly Val Arg Thr Ser
 65              70                  75                      80

Glu Thr
```

```
<210> 197
<211> 94
```

<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (2)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 197
Arg Xaa Pro Ile Phe Ile Gly Glu Asn Phe Tyr Pro Pro Val Arg Gly
 1   5   10   15

Arg Val Gly Met Ser Ala Cys Gln Gly Gly Gly Gly Gly Gly Gly Gly
             20   25   30

Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly
         35   40   45

Gly Gly Gly Gly Val Asp Lys Leu Pro Cys Leu Thr Met Cys Trp Cys
     50   55   60

Gly Asn Gly Ala Gln Pro Ala Arg Leu Lys Val Asp Gly Ile Pro Thr
65   70   75   80

Gly Gln Arg Lys Ser Tyr Ala Asp Thr Pro Ala Trp Pro Gly
             85   90

<210> 198
<211> 257
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (27)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 198
Met Thr Ala Ala Val Phe Phe Gly Cys Ala Phe Ile Ala Phe Gly Pro
 1   5   10   15

Ala Leu Ala Leu Tyr Val Phe Thr Ile Ala Xaa Glu Pro Leu Arg Ile
             20   25   30

Ile Phe Leu Ile Ala Gly Ala Phe Phe Trp Leu Val Ser Leu Leu Ile
         35   40   45

Ser Ser Leu Val Trp Phe Met Ala Arg Val Ile Ile Asp Asn Lys Asp
     50   55   60

Gly Pro Thr Gln Lys Tyr Leu Leu Ile Phe Gly Ala Phe Val Ser Val
65   70   75   80

Tyr Ile Gln Glu Met Phe Arg Phe Ala Tyr Tyr Lys Leu Leu Lys Lys
             85   90   95

Ala Ser Glu Gly Leu Lys Ser Ile Asn Pro Gly Glu Thr Ala Pro Ser
             100   105   110

                              101

Met Arg Leu Leu Ala Tyr Val Ser Gly Leu Gly Phe Gly Ile Met Ser
        115   120   125

Gly Val Phe Ser Phe Val Asn Thr Leu Ser Asp Ser Leu Gly Pro Gly
    130   135   140

Thr Val Gly Ile His Gly Asp Ser Pro Gln Phe Phe Leu Tyr Ser Ala
145   150   155   160

Phe Met Thr Leu Val Ile Ile Leu Leu His Val Phe Trp Gly Ile Val
            165   170   175

Phe Phe Asp Gly Cys Glu Lys Lys Lys Trp Gly Ile Leu Leu Ile Val
            180   185   190

Leu Leu Thr His Leu Leu Val Ser Ala Gln Thr Phe Ile Ser Ser Tyr
        195   200   205

Tyr Gly Ile Asn Leu Ala Ser Ala Phe Ile Ile Leu Val Leu Met Gly
    210   215   220

Thr Trp Ala Phe Leu Ala Ala Gly Gly Ser Cys Arg Ser Leu Lys Leu
225   230   235   240

Cys Leu Leu Cys Gln Asp Lys Asn Phe Leu Leu Tyr Asn Gln Arg Ser
            245   250   255

Arg

<210> 199
<211> 257
<212> PRT
<213> Homo sapiens

<400> 199
Met Thr Ala Ala Val Phe Phe Gly Cys Ala Phe Ile Ala Phe Gly Pro
1   5   10   15

Ala Leu Ala Leu Tyr Val Phe Thr Ile Ala Ile Glu Pro Leu Arg Ile
            20   25   30

Ile Phe Leu Ile Ala Gly Ala Phe Phe Trp Leu Val Ser Leu Leu Ile
        35   40   45

Ser Ser Leu Val Trp Phe Met Ala Arg Val Ile Ile Asp Asn Lys Asp
    50   55   60

Gly Pro Thr Gln Lys Tyr Leu Leu Ile Phe Gly Ala Phe Val Ser Val
65   70   75   80

Tyr Ile Gln Glu Met Phe Arg Phe Ala Tyr Tyr Lys Leu Leu Lys Lys
                85   90   95

Ala Ser Glu Gly Leu Lys Ser Ile Asn Pro Gly Glu Thr Ala Pro Ser
            100   105   110

102

```
Met Arg Leu Leu Ala Tyr Val Ser Gly Leu Gly Phe Gly Ile Met Ser
        115             120             125

Gly Val Phe Ser Phe Val Asn Thr Leu Ser Asp Ser Leu Gly Pro Gly
    130             135             140

Thr Val Gly Ile His Gly Asp Ser Pro Gln Phe Phe Leu Tyr Ser Ala
145             150             155             160

Phe Met Thr Leu Val Ile Ile Leu Leu His Val Phe Trp Gly Ile Val
            165             170             175

Phe Phe Asp Gly Cys Glu Lys Lys Trp Gly Ile Leu Leu Ile Val
            180             185             190

Leu Leu Thr His Leu Leu Val Ser Ala Gln Thr Phe Ile Ser Ser Tyr
        195             200             205

Tyr Gly Ile Asn Leu Ala Ser Ala Phe Ile Ile Leu Val Leu Met Gly
    210             215             220

Thr Trp Ala Phe Leu Ala Ala Gly Gly Ser Cys Arg Ser Leu Lys Leu
225             230             235             240

Cys Leu Leu Cys Gln Asp Lys Asn Phe Leu Leu Tyr Asn Gln Arg Ser
            245             250             255

Arg
```

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<210> 200
<211> 36
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (8)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (12)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (19)
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (23)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 200
Trp Arg His Leu Thr Val Ser Xaa Gly Leu Gln Xaa Arg Leu Ser Xaa
1   5   10   15

Arg Xaa Xaa Trp Glu Gly Xaa Pro Arg Ser Thr Thr Ala Ala Gly Trp
            20   25   30

Gly Arg Thr Gly
        35

<210> 201
<211> 21
<212> PRT
<213> Homo sapiens

<400> 201
His Leu Ser Leu Pro Arg Leu Leu Trp Thr Leu Gln Ile Pro Gln Cys
1   5   10   15

Pro Gln Leu Gln Asp
            20

<210> 202
<211> 78
<212> PRT
<213> Homo sapiens

<400> 202
Asp Pro Gln Asn Ile Tyr Trp Glu His Leu Ser Ile Arg Gly Phe Ile
1   5   10   15

Trp Trp Leu Arg Cys Leu Val Ile Asn Val Val Leu Phe Ile Leu Leu
            20   25   30

Phe Phe Leu Thr Thr Pro Ala Ile Ile Ile Thr Thr Met Asp Lys Phe
        35   40   45

Asn Val Thr Lys Pro Val Glu Tyr Leu Asn Val Arg Pro His Ala Pro
    50   55   60

Val Thr Phe His Ala Gly Ser Gln His Thr Asp Thr Arg Pro
65   70   75

<210> 203
<211> 318
<212> PRT
<213> Homo sapiens

104

<400> 203

Met His Lys Cys Tyr Thr Phe Leu Ile Phe Met Val Leu Leu Leu Pro
1   5   10   15

Ser Leu Gly Leu Ser Ser Leu Asp Leu Phe Phe Arg Trp Leu Phe Asp
            20   25   30

Lys Lys Phe Leu Ala Glu Ala Ala Ile Arg Phe Glu Cys Val Phe Leu
        35   40   45

Pro Asp Asn Gly Ala Phe Phe Val Asn Tyr Val Ile Ala Ser Ala Phe
    50   55   60

Ile Gly Asn Ala Met Asp Leu Leu Arg Ile Pro Gly Leu Leu Met Tyr
65   70   75   80

Met Ile Arg Leu Cys Leu Ala Arg Ser Ala Ala Glu Arg Arg Asn Val
            85   90   95

Lys Arg His Gln Ala Tyr Glu Phe Arg Phe Gly Ala Ala Tyr Ala Trp
            100   105   110

Met Met Cys Val Phe Thr Val Val Met Thr Tyr Ser Ile Thr Cys Pro
        115   120   125

Ile Ile Val Pro Phe Gly Leu Met Tyr Met Leu Leu Lys His Leu Val
    130   135   140

Asp Arg Tyr Asn Leu Tyr Tyr Ala Tyr Leu Pro Ala Lys Leu Asp Lys
145   150   155   160

Lys Ile His Ser Gly Ala Val Asn Gln Val Val Ala Ala Pro Ile Leu
            165   170   175

Cys Leu Phe Trp Leu Leu Phe Phe Ser Thr Met Arg Thr Gly Phe Leu
            180   185   190

Ala Pro Thr Ser Met Phe Thr Phe Val Val Leu Val Ile Thr Ile Val
    195   200   205

Ile Cys Leu Cys His Val Cys Phe Gly His Phe Lys Tyr Leu Ser Ala
    210   215   220

His Asn Tyr Lys Ile Glu His Thr Glu Thr Asp Thr Val Asp Pro Arg
225   230   235   240

Ser Asn Gly Arg Pro Pro Thr Ala Ala Ala Val Pro Lys Ser Ala Lys
            245   250   255

Tyr Ile Ala Gln Val Leu Gln Asp Ser Glu Val Asp Gly Asp Gly Asp
            260   265   270

Gly Ala Pro Gly Ser Ser Gly Asp Glu Pro Pro Ser Ser Ser Ser Gln
        275   280   285

Asp Glu Glu Leu Leu Met Pro Pro Asp Ala Leu Thr Asp Thr Asp Phe
    290   295   300

Gln Ser Cys Glu Asp Ser Leu Ile Glu Asn Glu Ile His Gln

305   310   315

<210> 204
<211> 65
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (9)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (21)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 204
Val Val Val Glu Leu Ile Asn Arg Xaa Gln Asn Tyr Phe Gln Tyr Ile
 1   5   10   15

Val Tyr Leu Tyr Xaa Lys Arg Asp Gly Pro Phe Tyr Gly Gly Thr Leu
             20   25   30

Ser Met Val Val Phe Cys Asp Val Leu Phe Leu Leu Leu Leu Phe Ala
         35   40   45

Leu Phe Ser Pro Ile Thr Ala Leu Leu Ser Leu Lys Arg Ile Asn Phe
     50   55   60

Ile
65

<210> 205
<211> 50
<212> PRT
<213> Homo sapiens

<400> 205
Ala Gln Glu Leu Arg Pro Ala Trp Glu Thr Trp Gln Gly Pro Ile Ser
 1   5   10   15

Thr Glu Thr Thr Glu Asn Trp Val Gly Met Val Ala Arg Val Pro Ala
             20   25   30

Ala Gln Glu Ala Glu Val Gly Gly Ser Leu Glu Pro Arg Arg Leu Arg
         35   40   45

Leu Gln
    50

<210> 206
<211> 90
<212> PRT

<213> Homo sapiens

<400> 206
Asp Leu Thr Cys Leu Leu Ser Ser Asn Phe Ile Ile Gly Ile Asn Val
1   5   10   15

His Phe Phe Pro Val Pro Val Ser Glu Ala Phe Ile Cys Val Cys Met
                20   25   30

Cys Val Leu Asn Lys Cys Ile Arg Tyr Leu Lys Asn Ser Asn Leu Asn
            35   40   45

Leu Asn Asn Leu Lys Asn Glu Ile Val Ile Leu Cys Val Lys Val Ser
        50   55   60

Asp Val Leu Tyr Ser Ala Leu Lys Thr Ile Phe Ile Tyr Ser Ser Thr
65   70   75   80

Asp Thr Lys Tyr Ile Leu Lys Leu Leu Ser
                85   90

<210> 207
<211> 41
<212> PRT
<213> Homo sapiens

<400> 207
Met Ser Cys Leu Trp Ala Gly Ile Lys Phe Leu Gly Phe Gly Phe Cys
1   5   10   15

Trp Met Asp Cys Ser Leu Cys Glu Pro Ile Trp Val Cys Gln Ile Gln
                20   25   30

Ser Leu Gly Cys His Gly Asn Leu Ala
            35   40

<210> 208
<211> 103
<212> PRT
<213> Homo sapiens

<400> 208
Ser Leu Asp Thr Ala Leu Leu Ser Thr Leu Cys Ser Leu Ala Phe Thr
1   5   10   15

Ala Ala Ser Thr Ser Ser Thr Val Ala Tyr Val Thr Asn Pro Lys Pro
                20   25   30

Leu Glu His Leu Val Phe Gly Ser Leu Ile Thr Thr Val Cys Glu Cys
            35   40   45

Ser Leu Leu Leu Arg Met Ala His Trp Thr Leu Thr Gly His Phe Lys
        50   55   60

Ala Gln Leu Ser Asp Glu Glu Leu Leu Gln Leu Leu Gly Leu Leu Lys
65   70   75   80

```
Arg Leu Cys Leu Arg His Asp Ser Ser Gly Lys Arg Asp Phe Asn Asp
              85                  90              . 95

Val Phe Ser Gly Ile His Gly
            100



<210> 209
<211> 49
<212> PRT
<213> Homo sapiens

<400> 209
Met Arg Gln Thr Lys Leu Glu Gly Trp Leu Ile Phe Pro Leu Phe Ser
  1           5               10              15

Cys Phe Ser Phe Ile Ser Leu Gly Ser Asp Glu Gly Pro Glu Ile Phe
            20              25              30

Ile Ser His Leu Lys Ser Leu Ala Asp Tyr Ser Arg Ala Leu Val Glu
          35              40              45

Val



<210> 210
<211> 49
<212> PRT
<213> Homo sapiens

<400> 210
Met Arg Gln Thr Lys Leu Glu Gly Trp Leu Ile Phe Pro Leu Phe Ser
  1           5               10              15

Cys Phe Ser Phe Ile Ser Leu Gly Ser Asp Glu Gly Pro Glu Ile Phe
            20            - 25              30

Ile Ser His Leu Lys Ser Leu Ala Asp Tyr Ser Arg Ala Leu Val Glu
          35 .             40              45

Val



<210> 211
<211> 489
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (79)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<221> SITE
<222> (321)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 211
Met Pro Gln Ala Ser Glu His Arg Leu Gly Arg Thr Arg Glu Pro Pro
  1   5   10   15

Val Asn Ile Gln Pro Arg Val Gly Ser Lys Leu Pro Phe Ala Pro Arg
           20   25   30

Ala Arg Ser Lys Glu Arg Arg Asn Pro Ala Ser Gly Pro Asn Pro Met
           35   40   45

Leu Arg Pro Leu Pro Pro Arg Pro Gly Leu Pro Asp Glu Arg Leu Lys
    50   55   60

Lys Leu Glu Leu Gly Arg Gly Arg Thr Ser Gly Pro Arg Pro Xaa Gly
 65   70   75   80

Pro Leu Arg Ala Asp His Gly Val Pro Leu Pro Gly Ser Pro Pro Pro
                85   90   95

Thr Val Ala Leu Pro Leu Pro Ser Arg Thr Asn Leu Ala Arg Ser Lys
                100   105   110

Ser Val Ser Ser Gly Asp Leu Arg Pro Met Gly Ile Ala Leu Gly Gly
    115   120   125

His Arg Gly Thr Gly Glu Leu Gly Ala Ala Leu Ser Arg Leu Ala Leu
    130   135   140

Arg Pro Glu Pro Pro Thr Leu Arg Arg Ser Thr Ser Leu Arg Arg Leu
145   150   155   160

Gly Gly Phe Pro Gly Pro Pro Thr Leu Phe Ser Ile Arg Thr Glu Pro
                165   170   175

Pro Ala Ser His Gly Ser Phe His Met Ile Ser Ala Arg Ser Ser Glu
                180   185   190

Pro Phe Tyr Ser Asp Asp Lys Met Ala His His Thr Leu Leu Leu Gly
        195   200   205

Ser Gly His Val Gly Leu Arg Asn Leu Gly Asn Thr Cys Phe Leu Asn
    210   215   220

Ala Val Leu Gln Cys Leu Ser Ser Thr Arg Pro Leu Arg Asp Phe Cys
225   230   235   240

Leu Arg Arg Asp Phe Arg Gln Glu Val Pro Gly Gly Gly Arg Ala Gln
            245   250   255

Glu Leu Thr Glu Ala Phe Ala Asp Val Ile Gly Ala Leu Trp His Pro
            260   265   270

Asp Ser Cys Glu Ala Val Asn Pro Thr Arg Phe Arg Ala Val Phe Gln
    275   280   285

Lys Tyr Val Pro Ser Phe Ser Gly Tyr Ser Gln Gln Asp Ala Gln Glu

109

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        290                  295                  300

Phe Leu Lys Leu Leu Met Glu Arg Leu His Leu Glu Ile Asn Arg Arg
305                 310                 315                 320

Xaa Arg Arg Ala Pro Pro Ile Leu Ala Asn Gly Pro Val Pro Ser Pro
            325                 330                 335

Pro Arg Arg Gly Gly Ala Leu Leu Glu Glu Pro Glu Leu Ser Asp Asp
        340                 345                 350

Asp Arg Ala Asn Leu Met Trp Lys Arg Tyr Leu Glu Arg Glu Asp Ser
        355                 360                 365

Lys Ile Val Asp Leu Phe Val Gly Gln Leu Lys Ser Cys Leu Lys Cys
    370                 375                 380

Gln Ala Cys Gly Tyr Arg Ser Thr Thr Phe Glu Val Phe Cys Asp Leu
385                 390                 395                 400

Ser Leu Pro Ile Pro Lys Lys Gly Phe Ala Gly Gly Lys Val Ser Leu
            405                 410                 415

Arg Asp Cys Phe Asn Leu Phe Thr Lys Glu Glu Glu Leu Glu Ser Glu
            420                 425                 430

Asn Ala Pro Val Cys Asp Arg Cys Arg Gln Lys Thr Arg Ser Thr Lys
        435                 440                 445

Lys Leu Thr Val Gln Arg Phe Pro Arg Ile Leu Val Leu His Leu Asn
    450                 455                 460

Arg Phe Ser Ala Ser Arg Gly Ser Ile Lys Lys Ser Ser Val Gly Val
465                 470                 475                 480

Asp Phe Ser Thr Ala Ala Thr Glu Pro
                485


<210> 212
<211> 463
<212> PRT
<213> Homo sapiens

<400> 212
Ala Arg Gly Thr Asn Leu Ala Arg Ser Lys Ser Val Ser Ser Gly Asp
  1               5                  10                  15

Leu Arg Pro Met Gly Ile Ala Leu Gly Gly His Arg Gly Thr Gly Glu
            20                  25                  30

Leu Gly Ala Ala Leu Ser Arg Leu Ala Leu Arg Pro Glu Pro Pro Thr
        35                  40                  45

Leu Arg Arg Ser Thr Ser Leu Arg Arg Leu Gly Gly Phe Pro Gly Pro
    50                  55                  60

Pro Thr Leu Phe Ser Ile Arg Thr Glu Pro Pro Ala Ser His Gly Ser
65                  70                  75                  80
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```
Phe His Met Ile Ser Ala Arg Ser Ser Glu Pro Phe Tyr Ser Asp Asp
            85                  90              95

Lys Met Ala His His Thr Leu Leu Leu Gly Ser Gly His Val Gly Leu
            100             105             110

Arg Asn Leu Gly Asn Thr Cys Phe Leu Asn Ala Val Leu Gln Cys Leu
        115             120             125

Ser Ser Thr Arg Pro Leu Arg Asp Phe Cys Leu Arg Arg Asp Phe Arg
    130             135             140

Gln Glu Val Pro Gly Gly Gly Arg Ala Gln Glu Leu Thr Glu Ala Phe
145             150             155                 160

Ala Asp Val Ile Gly Ala Leu Trp His Pro Asp Ser Cys Glu Ala Val
            165             170             175

Asn Pro Thr Arg Phe Arg Ala Val Phe Gln Lys Tyr Val Pro Ser Phe
            180             185             190

Ser Gly Tyr Ser Gln Leu Asp Ala Gln Glu Phe Leu Lys Leu Leu Met
        195             200             205

Glu Arg Leu His Leu Glu Ile Asn Arg Arg Asp Arg Arg Ala Pro Pro
    210             215             220

Ile Leu Ala Asn Gly Pro Val Pro Ser Pro Pro Arg Arg Gly Gly Ala
225             230             235                 240

Leu Leu Glu Glu Pro Glu Leu Ser Asp Asp Asp Arg Ala Asn Leu Met
            245             250             255

Trp Lys Arg Tyr Leu Glu Arg Glu Asp Ser Lys Ile Val Asp Leu Phe
            260             265             270

Val Gly Gln Leu Lys Ser Cys Leu Lys Cys Gln Ala Cys Gly Tyr Arg
        275             280             285

Ser Thr Thr Phe Glu Val Phe Cys Asp Leu Ser Leu Pro Ile Pro Lys
    290             295             300

Lys Gly Phe Ala Gly Gly Lys Val Ser Leu Arg Asp Cys Phe Asn Leu
305             310             315                 320

Phe Thr Lys Glu Glu Glu Leu Glu Ser Glu Asn Ala Pro Val Cys Asp
            325             330             335

Arg Cys Arg Gln Lys Thr Arg Ser Thr Lys Lys Leu Thr Val Gln Arg
        340             345             350

Phe Pro Arg Ile Leu Val Leu His Leu Asn Arg Phe Ser Ala Ser Arg
        355             360             365

Gly Ser Ile Lys Lys Ser Ser Val Gly Val Asp Phe Pro Leu Gln Arg
    370             375             380

Leu Ser Leu Gly Asp Phe Ala Ser Asp Lys Ala Gly Ser Pro Val Tyr
385             390             395                 400
```

                                111

```
Gln Leu Tyr Ala Leu Cys Asn His Ser Gly Ser Val His Tyr Gly His
            405               410               415

Tyr Thr Ala Leu Cys Arg Cys Gln Thr Gly Trp His Val Tyr Asn Asp
            420               425               430

Ser Arg Val Ser Pro Val Ser Glu Asn Gln Val Ala Ser Ser Glu Gly
        435               440               445

Tyr Val Leu Phe Tyr Gln Leu Met Gln Glu Pro Pro Arg Cys Leu
    450               455               460
```

<210> 213
<211> 53
<212> PRT
<213> Homo sapiens

<400> 213
```
Lys Ile Glu Leu Met Val Cys Thr Lys Ser Leu Val Tyr Val Leu Val
  1               5               10              15

Phe Gln Asn Asn Phe Tyr Ile Asn Ile Tyr Ile Val Lys Lys Phe Phe
            20              25              30

Leu Ile Phe Gly Trp Asp Ile Arg Lys Tyr Leu Tyr Tyr Thr Leu Ser
        35              40              45

Tyr Tyr Asn Gly Thr
    50
```

<210> 214
<211> 9
<212> PRT
<213> Homo sapiens

<400> 214
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Leu Leu Ser Cys Phe Tyr Phe Phe Leu
  1               5
```

<210> 215
<211> 66
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (8)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (11)
<223> Xaa equals any of the naturally occurring L-amino acids

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<220>
<221> SITE
<222> (18)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (61)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 215
Met Leu Leu Leu Cys Tyr His Xaa Phe Leu Xaa Phe Val Leu Gly Thr
 1               5                  10                  15

Gly Xaa Val Asn Ile Glu Glu Ala Glu Lys Leu Leu Lys Pro Tyr Leu
            20                  25                  30

Asn Arg Tyr Pro Lys Gly Ala Ile Phe Leu Phe Phe Ala Gly Arg Ile
        35                  40                  45

Glu Val Ile Lys Gly Asn Ile Asp Ala Ala Ile Arg Xaa Phe Glu Glu
    50                  55                  60

Cys Cys
 65



<210> 216
<211> 66
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (8)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (11)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (18)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (61)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 216
Met Leu Leu Leu Cys Tyr His Xaa Phe Leu Xaa Phe Val Leu Gly Thr
 1               5                  10                  15

Gly Xaa Val Asn Ile Glu Glu Ala Glu Lys Leu Leu Lys Pro Tyr Leu
            20                  25                  30
```

Asn Arg Tyr Pro Lys Gly Ala Ile Phe Leu Phe Phe Ala Gly Arg Ile
         35   40   45

Glu Val Ile Lys Gly Asn Ile Asp Ala Ala Ile Arg Xaa Phe Glu Glu
         50   55   60

Cys Cys
 65

<210> 217
<211> 43
<212> PRT
<213> Homo sapiens

<400> 217
Met Tyr Lys Ile Thr Tyr Arg Val Cys Phe Leu Cys Gln Pro Leu Met
 1   5   10   15

Val Gly Leu Gly Cys Ile Gly Ser Ile Ala Ile Val Leu Leu Leu Leu
         20   25   30

Leu Leu Val Pro His Val Cys Pro Lys Ile Leu
         35   40

<210> 218
<211> 43
<212> PRT
<213> Homo sapiens

<400> 218
Met Tyr Lys Ile Thr Tyr Arg Val Cys Phe Leu Cys Gln Pro Leu Met
 1   5   10   15

Val Gly Leu Gly Cys Ile Gly Ser Ile Ala Ile Val Leu Leu Leu Leu
         20   25   30

Leu Leu Val Pro His Val Cys Pro Lys Ile Leu
         35   40

<210> 219
<211> 79
<212> PRT
<213> Homo sapiens

<400> 219
Ala Pro Leu Ala Ala Ser Thr Ile Leu Ala Val Ala Ser Ala Arg Ile
 1   5   10   15

Leu Ala Ala Leu Lys Ser Leu Arg Glu Phe Ser Arg Ser Leu Ser Pro
         20   25   30

Ser Ala Ser Ala Leu Met Ala Leu Thr Arg Ser Asp Val Ala Trp Ala
         35   40   45

114

```
Arg Met Arg Ala Cys Arg Thr Ile Ser Pro Ala Ser Pro Met Glu Leu
    50          '           55              60

Lys Met Phe Ser Val Thr Val Arg Met Val Ser Val Ala Trp Ser
65              70              75
```

```
<210> 220
<211> 72
<212> PRT
<213> Homo sapiens

<400> 220
Met Gly Thr Leu Met Val Leu Thr Arg Leu Ala Val Leu Leu Ala Thr
  1           5               10                  15

Ser Leu Ala Asp Cys Thr Asn Trp Arg Leu Ala Val Gly Leu Val Val
            20              25              30

Arg Ala Glu Ala Arg Arg Gln Leu Leu His Ser Ala Glu Val Cys Leu
        35              40              45

Ala Thr Met Val Ala Ala Glu Ser Thr Trp Ala Trp Val Gln Pro Gly
    50              55              60

Ser Pro Lys Leu Trp Gln Ala Ile
65              70
```

```
<210> 221
<211> 72
<212> PRT
<213> Homo sapiens

<400> 221
Met Gly Thr Leu Met Val Leu Thr Arg Leu Ala Val Leu Leu Ala Thr
  1           5               10                  15

Ser Leu Ala Asp Cys Thr Asn Trp Arg Leu Ala Val Gly Leu Val Val
            20              25              30

Arg Ala Glu Ala Arg Arg Gln Leu Leu His Ser Ala Glu Val Cys Leu
        35              40              45

Ala Thr Met Val Ala Ala Glu Ser Thr Trp Ala Trp Val Gln Pro Gly
    50              55              60

Ser Pro Lys Leu Trp Gln Ala Ile
65              70
```

```
<210> 222
<211> 43
<212> PRT
<213> Homo sapiens
```

```
<400> 222
Met Cys Arg Thr Gln Phe His Leu Phe Trp Phe Ile Val Thr Glu Leu
 1               5                  10                  15

Ser Pro Val Ile Trp Ala Lys Ala Asn Gln Lys Leu Ser Cys Leu Ser
                20                  25                  30

Gln Gln Thr Leu Val Leu Val Tyr Phe Cys Arg
            35                  40


<210> 223
<211> 84
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (36)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (37)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 223
Phe Ser Ile Phe Lys Asn His Ile Ser Leu Cys Trp Leu Ile Ile Ile
 1               5                  10                  15

Asn Phe Lys His Ser Phe Leu Gln Ser Gly Phe Ser Glu Phe Phe Phe
                20                  25                  30

Phe Lys Gln Xaa Xaa His Ser Phe Phe Leu Val Thr Ser Lys Gly Gly
            35                  40                  45

Thr Gly Val Gly Gly Lys Glu Cys Leu Lys Met Lys Ser Leu Asp Ile
        50                  55                  60

Glu Gly Pro Arg Arg Thr Gly Tyr Ala Lys Ile Ile Ser Asn Ser Ser
 65                  70                  75                  80

Thr Ile Leu Glu


<210> 224
<211> 43
<212> PRT
<213> Homo sapiens

<400> 224
Met Cys Arg Thr Gln Phe His Leu Phe Trp Phe Ile Val Thr Glu Leu
 1               5                  10                  15

Ser Pro Val Ile Trp Ala Lys Ala Asn Gln Lys Leu Ser Cys Leu Ser
                20                  25                  30
```

```
Gln Gln Thr Leu Val Leu Val Tyr Phe Cys Arg
        35                      40


<210> 225
<211> 27
<212> PRT
<213> Homo sapiens

<400> 225
Pro His Cys Arg Trp Pro Gly Leu Tyr Arg Gln Leu Gly Arg Arg Arg
  1               5                  10                  15

Arg Ser Thr Ala Leu Leu Arg Cys His Asn Val
            20                  25


<210> 226
<211> 37
<212> PRT
<213> Homo sapiens

<400> 226
Met Arg Lys Arg Arg Pro Tyr Asn Arg Trp Thr Gly Cys Trp Leu Arg
  1               5                  10                  15

Leu Ala Val Ser Cys Arg Trp Ala Val Ala Ile Ser Ala Ser Pro Trp
            20                  25                  30

Leu Arg Leu Thr Ser
        35


<210> 227
<211> 37
<212> PRT
<213> Homo sapiens

<400> 227
Met Arg Lys Arg Arg Pro Tyr Asn Arg Trp Thr Gly Cys Trp Leu Arg
  1               5                  10                  15

Leu Ala Val Ser Cys Arg Trp Ala Val Ala Ile Ser Ala Ser Pro Trp
            20                  25                  30

Leu Arg Leu Thr Ser
        35


<210> 228
<211> 153
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
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117

<222> (98)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 228
Met Ala Ala Thr Gln Thr Gly Thr Cys Leu Met Val Ala Ala Leu Cys
1   5   10   15

Phe Val Leu Val Leu Gly Ser Leu Val Pro Cys Leu Pro Glu Phe Ser
            20   25   30

Ser Gly Ser Gln Thr Val Lys Glu Asp Pro Leu Ala Ala Asp Gly Val
            35   40   45

Tyr Thr Ala Ser Gln Met Pro Ser Arg Ser Leu Leu Phe Tyr Asp Asp
        50   55   60

Gly Ala Gly Leu Trp Glu Asp Gly Arg Ser Thr Leu Leu Pro Met Glu
65   70   75   80

Pro Pro Asp Gly Trp Glu Ile Asn Pro Gly Gly Pro Ala Glu Gln Arg
                85   90   95

Pro Xaa Asp His Leu Gln His Asp His Leu Asp Ser Thr His Glu Thr
            100   105   110

Thr Lys Tyr Leu Ser Glu Ala Trp Pro Lys Asp Gly Gly Asn Gly Thr
            115   120   125

Ser Pro Asp Phe Ser His Ser Lys Glu Trp Phe His Asp Arg Asp Leu
    130   135   140

Gly Pro Asn Thr Thr Ile Lys Leu Ser
145   150

<210> 229
<211> 153
<212> PRT
<213> Homo sapiens

<400> 229
Met Ala Ala Thr Gln Thr Gly Thr Cys Leu Met Val Ala Ala Leu Cys
1   5   10   15

Phe Val Leu Val Leu Gly Ser Leu Val Pro Cys Leu Pro Glu Phe Ser
            20   25   30

Ser Gly Ser Gln Thr Val Lys Glu Asp Pro Leu Ala Ala Asp Gly Val
            35   40   45

Tyr Thr Ala Ser Gln Met Pro Ser Arg Ser Leu Leu Phe Tyr Asp Asp
        50   55   60

Gly Ala Gly Leu Trp Glu Asp Gly Arg Ser Thr Leu Leu Pro Met Glu
65   70   75   80

Pro Pro Asp Gly Trp Glu Ile Asn Pro Gly Gly Pro Ala Glu Gln Arg
                85   90   95

Pro Arg Asp His Leu Gln His Asp His Leu Asp Ser Thr His Glu Thr
            100   105   110

Thr Lys Tyr Leu Ser Glu Ala Trp Pro Lys Asp Gly Gly Asn Gly Thr
            115   120   125

Ser Pro Asp Phe Ser His Ser Lys Glu Trp Phe His Asp Arg Asp Leu
    130   135   140

Gly Pro Asn Thr Thr Ile Lys Leu Ser
145   150

<210> 230
<211> 105
<212> PRT
<213> Homo sapiens

<400> 230
Met Cys Leu Thr Thr Ala Gly Phe Cys Leu Leu Ala Ile His Ser Phe
    1   5   10   15

Ala Leu Gly Val Gln Ser Arg Gln Gln His Ser Val Pro Ile Val Phe
            20   25   30

Glu Val Leu Pro Leu Arg Val Pro Glu Pro Ser Arg Val Thr Gly Cys
        35   40   45

Ser Ser Phe Phe Gln Thr Lys Val Leu Cys Lys Gln His Leu Leu Gly
    50   55   60

Pro Arg Ala Ser Val Asn Ile Val Leu Ala Cys Leu Ala Cys Cys His
65   70   75   80

Arg Lys Gly Leu Cys Val His Ile Pro Ala Asn Leu Met Ser Pro Ser
                85   90   95

Ser Ala Lys Leu Tyr His Ser Leu His
            100   105

<210> 231
<211> 37
<212> PRT
<213> Homo sapiens

<400> 231
Phe Cys Leu Ile Trp Ser Ala Tyr Leu Leu Met Cys Leu Phe Leu Phe
    1   5   10   15

Cys Leu Phe Tyr Phe Tyr Phe Ser Val Asn Ala Arg Thr Asp Leu His
            20   25   30

Val Lys Ser Gly Leu
            35

```
<210> 232
<211> 105
<212> PRT
<213> Homo sapiens

<400> 232
Met Cys Leu Thr Thr Ala Gly Phe Cys Leu Leu Ala Ile His Ser Phe
 1               5                  10                  15

Ala Leu Gly Val Gln Ser Arg Gln Gln His Ser Val Pro Ile Val Phe
                20                  25                  30

Glu Val Leu Pro Leu Arg Val Pro Glu Pro Ser Arg Val Thr Gly Cys
        35                  40                  45

Ser Ser Phe Phe Gln Thr Lys Val Leu Cys Lys Gln His Leu Leu Gly
        50                  55                  60

Pro Arg Ala Ser Val Asn Ile Val Leu Ala Cys Leu Ala Cys Cys His
65                  70                  75                  80

Arg Lys Gly Leu Cys Val His Ile Pro Ala Asn Leu Met Ser Pro Ser
                85                  90                  95

Ser Ala Lys Leu Tyr His Ser Leu His
            100                 105


<210> 233
<211> 5
<212> PRT
<213> Homo sapiens

<400> 233
Tyr Ser Pro Leu Cys
 1               5


<210> 234
<211> 40
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (15)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 234
Met Ala Tyr Ser Pro Leu Leu Ile Ser Leu Val Leu Ala Phe Xaa Pro
 1               5                  10                  15

Ala Ser Thr Tyr Gly Arg Ala Ser Ile Asp Phe Thr Cys Phe Pro Asn
                20                  25                  30

His Tyr Gly Ile Ser Asn Gln Tyr
            35                  40
```

<210> 235
<211> 160
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (55)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 235
Phe Phe Asp Ser Ile Gly Ala Leu Val Pro Gln Phe Leu Ala Asn Asp
 1   5   10   15

Asp Glu Leu Ser Ser His Thr Tyr Gly Leu Leu Val Asn Lys Asn Asn
            20   25   30

His Leu Gly His Leu Ala Val Cys Ile Ser Gln Cys Ile Trp Gly Leu
        35   40   45

Leu Ser Pro Cys Glu Leu Xaa Gly Ile Ser Leu Gly Ser Ile Ile Leu
    50   55.   60

Phe Cys Pro Thr Pro Cys Ser Met Gln Thr Pro Ser Pro Ala Cys Trp
65   70   75   80

Ser Pro Ser Gly Asn Pro Gly Leu Ala His Thr Leu Cys Trp Arg Ala
                85   90   95

Cys Thr Leu Met Pro Leu Leu Arg Leu Gly Pro Tyr Leu Val Thr Leu
                100   105   110

Phe Ala Leu Pro Ser Glu Thr Glu Gln Leu Ala Pro Ser Ala Leu Val
        115   120   125

Val Pro Cys Glu Ala Leu Leu Leu Ser Gly Phe Leu His Arg Asp Pro
    130   135   140

Cys Arg Leu Pro Ala Asp Met Gln Asp Ala Leu Leu Ser Val Asp Val
145   150   155   160

<210> 236
<211> 40
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (15)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 236
Met Ala Tyr Ser Pro Leu Leu Ile Ser Leu Val Leu Ala Phe Xaa Pro

```
        1                 5                    10                   15
                                                                    .
Ala Ser Thr Tyr Gly Arg Ala Ser Ile Asp Phe Thr Cys Phe Pro Asn
                20                   25                   30

His Tyr Gly Ile Ser Asn Gln Tyr
          35                  40  .
```

<210> 237
<211> 236
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (29)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (70)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (73)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (80)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (97)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (112)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (117)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (122)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 237
Met Glu Xaa Pro Ala Gln Leu Leu Phe Leu Leu Leu Leu Trp Leu Pro
1   5   10   15

Asp Thr Thr Gly Glu Ile Val Leu Thr Gln Ser Pro Xaa Thr Leu Ser
            20   25   30

Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser
        35   40   45

Val Ser Ser Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro
    50   55   60

Arg Leu Leu Ile Tyr Xaa Ala Ser Xaa Arg Ala Thr Gly Ile Pro Xaa
65   70   75   80

Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser
            85   90   95

Xaa Leu Glu Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Arg Xaa
        100   105   110

Asn Trp Pro Pro Xaa Tyr Thr Phe Gly Xaa Gly Thr Lys Val Glu Ile
        115   120   125

Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp
    130   135   140

Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn
145   150   155   160

Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu
            165   170   175

Gln Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys Asp
        180   185   190

Ser Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr
    195   200   205

Glu Lys His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu Ser
    210   215   220

Ser Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
225   230   235

<210> 238
<211> 144
<212> PRT
<213> Homo sapiens

<400> 238
Met Arg Val Pro Ala Gln Leu Leu Gly Leu Leu Leu Leu Trp Leu Ser
1   5   10   15

Gly Ala Lys Cys Asp Thr Gln Met Thr Gln Ser Pro Ser Ser Leu Ser
            20   25   30

```
Ala Ser Val Gly Asp Thr Val Thr Ile Thr Cys Gln Ala Ser Asp Asp
         35              40              45

Ile Ser Lys Asp Leu Asn Trp Phe Gln Gln Lys Pro Gly Thr Ala Pro
     50              55              60

Lys Leu Leu Ile Phe Asp Ala Ser Asn Leu Glu Thr Gly Val Pro Ser
 65              70              75              80

Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Phe Thr Ile Ser
             85              90              95

Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Tyr Asp
             100             105             110

Asn Pro Pro Ser Leu Ser Ala Glu Gly Pro Lys Trp Arg Ser Asn Glu
         115             120             125

Leu Trp Leu His His Leu Ser Ser Ser Ser Arg His Leu Met Ser Ser
     130             135             140
```

<210> 239
<211> 50
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (4)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (10)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (22)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (35)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (39)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (42)
<223> Xaa equals any of the naturally occurring L-amino acids

```
<400> 239
Val His Ala Xaa Thr Pro Phe Ala Gly Xaa Cys Phe Asp Pro Val Ser
  1               5                  10                  15

Leu Tyr Trp Cys Tyr Xaa Asn Pro Gly Thr His Cys Tyr Pro Thr Leu
             20                  25                  30

Arg Gly Xaa Glu Gln Arg Xaa Pro Ser Xaa Arg Ser His Ile Val Leu
         35                  40                  45

Arg Ser
     50
```

```
<210> 240
<211> 64
<212> PRT
<213> Homo sapiens
```

```
<400> 240
Met Val Ser Pro Leu Ile Ser Ala Leu Phe His Val Pro Phe Leu Trp
  1               5                  10                  15

Leu Gly Met Phe Phe Pro His Ser Leu Ser Gly Pro Phe Pro Ser His
             20                  25                  30

Leu Arg Arg Ala Ser Ser Ser Arg Lys Pro Leu Val Lys Pro Pro Arg
         35                  40                  45

Ala Arg Gln Tyr Pro Pro Leu Ala Ser Ser Gly Tyr Arg Gly Arg Ile
     50                  55                  60
```

```
<210> 241
<211> 26
<212> PRT
<213> Homo sapiens
```

```
<400> 241
Met Ser Phe Pro His Ala Ser Thr Leu Pro Phe His Lys Leu Ser Asp
  1               5                  10                  15

Leu Gln His Thr Leu Pro Asn His Gln Gly
             20                  25
```

```
<210> 242
<211> 64
<212> PRT
<213> Homo sapiens
```

```
<400> 242
Met Val Ser Pro Leu Ile Ser Ala Leu Phe His Val Pro Phe Leu Trp
```

```
      1              5                   10                  15

Leu Gly Met Phe Phe Pro His Ser Leu Ser Gly Pro Phe Pro Ser His
          20                   25                  30

Leu Arg Arg Ala Ser Ser Ser Arg Lys Pro Leu Val Lys Pro Pro Arg
          35             40                  45

Ala Arg Gln Tyr Pro Pro Leu Ala Ser Ser Gly Tyr Arg Gly Arg Ile
      50             55                  60
```

<210> 243
<211> 61
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (21)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (27)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (31)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 243

```
Phe Asn Phe Lys Phe Ala His Arg Pro Ser Asn Pro Leu Val Asn Leu
    1              5                   10                  15

Thr Val Ser Pro Xaa Arg Asn Ser Ser Leu Xaa Thr Arg Lys Xaa Pro
          20                   25                  30

Cys Arg Glu Ser Lys Lys Phe Asn Thr His Ser Arg Pro Lys Ser Ser
          35             40                  45

His Gln Leu Arg Lys Arg Ser Ser Ser Thr Pro Thr Thr
      50             55                  60
```

<210> 244
<211> 56
<212> PRT
<213> Homo sapiens

<400> 244

```
Met Leu Ile Phe Leu Lys Cys Leu Thr Val Ser Tyr Ala Lys Tyr Ser
    1              5                   10                  15
```

Ser Lys Ile Tyr Thr Ala Val Ser Asn Thr Phe Ser Thr Ala Ser Asp
          20   25   30

Ser Trp Leu Cys Val Lys Thr Pro Arg Gly Tyr His Trp Phe Met Ser
          35   40   45

Leu Glu Thr Pro Asp Ile Glu Gln
       50   55

<210> 245
<211> 10
<212> PRT
<213> Homo sapiens

<400> 245
Val Leu Leu Phe Leu Ser Leu Leu Thr Ser
    1   5   10

<210> 246
<211> 56
<212> PRT
<213> Homo sapiens

<400> 246
Met Leu Ile Phe Leu Lys Cys Leu Thr Val Ser Tyr Ala Lys Tyr Ser
    1   5   10   15

Ser Lys Ile Tyr Thr Ala Val Ser Asn Thr Phe Ser Thr Ala Ser Asp
          20   25   30

Ser Trp Leu Cys Val Lys Thr Pro Arg Gly Tyr His Trp Phe Met Ser
          35   40   45

Leu Glu Thr Pro Asp Ile Glu Gln
       50   55

<210> 247
<211> 75
<212> PRT
<213> Homo sapiens

<400> 247
Glu Asp Met Pro Arg Arg Lys Glu Glu Leu Thr Asp Tyr Gln Lys Lys
    1   5   10   15

Lys Val Ile Leu Gln Asn Leu Lys His Ser Leu Phe Leu Ser Leu Leu
          20   25   30

Ser His Tyr Phe Tyr Ser Asn Pro Leu Glu Tyr Leu His Phe Ala Ser
          35   40   45

Glu Gln Arg Asp Lys Phe Phe Ser His His Val Cys Thr Gly Val Val
       50   55   60

127

Leu Ile Leu Asp Ile Ala Gly Thr Asn Phe Ser
65   70   75

<210> 248
<211> 55
<212> PRT
<213> Homo sapiens

<400> 248
Met Ile Tyr Phe Ala Leu Leu Leu Ala Ser Leu Phe Phe Leu Leu Lys
1   5   10   15

Val Lys Ser His Phe Gly Cys Lys Asn Val Thr Thr Thr Ser Ala Arg
            20   25   30

Ile Phe Leu Lys Pro Leu Cys Thr Pro Lys Ser Ile Phe Pro Leu Ser
        35   40   45

Arg Tyr Gly Arg Met Ser Ser
    50   55

<210> 249
<211> 55
<212> PRT
<213> Homo sapiens

<400> 249
Met Ile Tyr Phe Ala Leu Leu Leu Ala Ser Leu Phe Phe Leu Leu Lys
1   5   10   15

Val Lys Ser His Phe Gly Cys Lys Asn Val Thr Thr Thr Ser Ala Arg
            20   25   30

Ile Phe Leu Lys Pro Leu Cys Thr Pro Lys Ser Ile Phe Pro Leu Ser
        35   40   45

Arg Tyr Gly Arg Met Ser Ser
    50   55

<210> 250
<211> 85
<212> PRT
<213> Homo sapiens

<400> 250
Met Leu His Asn Ala Phe Leu Phe Val Leu Phe Ala Leu Val Ser Gly
1   5   10   15

Tyr Gly Asn Tyr Ala Ala Thr Ala His Asp Trp Leu Tyr Glu Asn Gly
            20   25   30

Gln Leu Ser Arg Lys Glu Ala Asp Ala Val Leu Tyr Arg Ala Leu Arg
        35   40   45

128

```
Ala Glu Gly Val Ala Arg Trp Arg Ala Trp Leu Met Tyr Ala Gly Val
    50                  55                  60

Arg Leu Gly Gly Ala Lys Gln Tyr Lys Thr Pro Thr Ser Ser Gly Phe
65                  70                  75                  80

Ser Ser Ser Gly Asp
                85
```

```
<210> 251
<211> 85
<212> PRT
<213> Homo sapiens
```

```
<400> 251
Met Leu His Asn Ala Phe Leu Phe Val Leu Phe Ala Leu Val Ser Gly
    1               5                   10                  15

Tyr Gly Asn Tyr Ala Ala Thr Ala His Asp Trp Leu Tyr Glu Asn Gly
                20                  25                  30

Gln Leu Ser Arg Lys Glu Ala Asp Ala Val Leu Tyr Arg Ala Leu Arg
            35                  40                  45

Ala Glu Gly Val Ala Arg Trp Arg Ala Trp Leu Met Tyr Ala Gly Val
    50                  55                  60

Arg Leu Gly Gly Ala Lys Gln Tyr Lys Thr Pro Thr Ser Ser Gly Phe
65                  70                  75                  80

Ser Ser Ser Gly Asp
                85
```

```
<210> 252
<211> 59
<212> PRT
<213> Homo sapiens
```

```
<400> 252
Met Ile Ile Ala Asn Ile Phe Met Asn Pro Leu Leu Cys Ala Gly Tyr
    1               5                   10                  15

Leu Phe Cys Phe Ala Tyr Thr Leu Ile His Leu Ile Leu Leu Thr Thr
                20                  25                  30

Ser Glu Val Cys Ser Ile Thr Ala Pro Phe Phe Thr Ala Val Leu Gln
            35                  40                  45

Ser Ser Ala Cys Pro Ser Thr His Trp Pro Glu
    50                  55
```

```
<210> 253
<211> 59
<212> PRT
```

<213> Homo sapiens

<400> 253
Met Ile Ile Ala Asn Ile Phe Met Asn Pro Leu Leu Cys Ala Gly Tyr
1   5   10   15

Leu Phe Cys Phe Ala Tyr Thr Leu Ile His Leu Ile Leu Leu Thr Thr
            20   25   30

Ser Glu Val Cys Ser Ile Thr Ala Pro Phe Phe Thr Ala Val Leu Gln
        35   40   45

Ser Ser Ala Cys Pro Ser Thr His Trp Pro Glu
    50   55

<210> 254
<211> 67
<212> PRT
<213> Homo sapiens

<400> 254
Met Leu Phe Leu Ile Tyr Val Ser Leu Leu Met Leu Leu Phe Ser Leu
1   5   10   15

Cys Leu Ser Leu Pro His Leu Gln Pro Pro Ser Leu Arg Glu Ile Leu
            20   25   30

Ile Pro Val His Ser Leu Arg Phe Ser Leu Val Ser Pro Leu His Gly
        35   40   45

Ser Leu Ala Ser Ser Leu Leu Leu Gln His Cys Gly Thr Leu Arg Gln
    50   55   60

Val Phe Phe
65

<210> 255
<211> 67
<212> PRT
<213> Homo sapiens

<400> 255
Met Leu Phe Leu Ile Tyr Val Ser Leu Leu Met Leu Leu Phe Ser Leu
1   5   10   15

Cys Leu Ser Leu Pro His Leu Gln Pro Pro Ser Leu Arg Glu Ile Leu
            20   25   30

Ile Pro Val His Ser Leu Arg Phe Ser Leu Val Ser Pro Leu His Gly
        35   40   45

Ser Leu Ala Ser Ser Leu Leu Leu Gln His Cys Gly Thr Leu Arg Gln
    50   55   60

Val Phe Phe
65

130

<210> 256
<211> 86
<212> PRT
<213> Homo sapiens

<400> 256
Ser Leu Lys His Phe Trp Ser Gln Gly Phe Trp Ile Lys Asp Thr Gln
 1   5   10   15

Cys Ala Thr Cys Arg Met Val Val Ala Arg Trp Glu Glu Arg Met Glu
                20   25   30

Ser Tyr Cys Leu Met Ile Gln Cys Phe Arg Leu Gly Arg Trp Lys Val
         35   40   45

Leu Glu Met Cys Asp Gly Tyr Gly Cys Ala Thr Met Gly Arg Tyr Leu
     50   55   60

Val Leu Leu Asn Cys Ala His Leu Lys Met Val Lys Met Ile Asn Phe
 65   70   75   80

Val Tyr Val Leu Lys Gln
                85

<210> 257
<211> 52
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (36)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (37)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 257
Met Gln Arg Leu Gly Lys Ala Pro Gly Thr Trp Gln Ala Ile Ser Lys
 1   5   10   15

Cys Trp Leu Leu Leu Leu Leu Ser Leu Pro Phe Ser Gln Ser Ile Ile
                20   25   30

Ile Ser Leu Xaa Xaa Gly Thr Met Ser Tyr Leu Pro Leu Tyr Phe Pro
         35   40   45

Gln Tyr Phe Pro
     50

<210> 258

131

<211> 52
<212> PRT
<213> Homo sapiens

<400> 258
Met Gln Arg Leu Gly Lys Ala Pro Gly Thr Trp Gln Ala Ile Ser Lys
1   5   10   15

Cys Trp Leu Leu Leu Leu Leu Ser Leu Pro Phe Ser Gln Ser Ile Ile
            20   25   30

Ile Ser Leu Arg Ala Gly Thr Met Ser Tyr Leu Pro Leu Tyr Phe Pro
        35   40   45

Gln Tyr Phe Pro
     50

<210> 259
<211> 20
<212> PRT
<213> Homo sapiens

<400> 259
Met Leu Cys Val Leu Leu Ala Val Ala Phe Gln Ser Ser Pro Ile Pro
1   5   10   15

Gly Ala Ala Ala
             20

<210> 260
<211> 69
<212> PRT·
<213> Homo sapiens

<400> 260
Met Ala Leu Phe Arg Pro Ile Leu Leu Pro Ala Pro Gly Ala Trp Trp
1   5   10   15

Trp Pro Cys His His Ala Leu Cys Pro Ser Gly Cys Gly Phe Pro Glu
            20   25   30

Gln Pro His Ser Arg Cys Ser Ser Leu Glu Leu Gln Ser Ala Ser Arg
        35   40   45

Gln Cys Trp Leu Gln Trp Leu Gly Asp Ile Arg Pro Leu Leu Leu Gln
     50   55   60

Gly Arg Glu Val Thr
 65

<210> 261
<211> 51
<212> PRT
<213> Homo sapiens

```
<220>
<221> SITE
<222> (34)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 261
Met Gly Leu Ile Ala Ala Asp Val Asn Leu Asp Leu Leu Val Gln Val
 1               5                  10                  15

Val Pro Ala Ser Cys Leu His Cys Gly Val Thr Ile Phe Pro Phe Pro
            20                  25                  30

His Xaa Ile His Gln Lys Pro Val Thr Lys Arg Gly Gln Thr Pro Gly
        35                  40                  45

Gln Gly Asn
     50


<210> 262
<211> 51
<212> PRT
<213> Homo sapiens

<400> 262
Met Gly Leu Ile Ala Ala Asp Val Asn Leu Asp Leu Leu Val Gln Val
 1               5                  10                  15

Val Pro Ala Ser Cys Leu His Cys Gly Val Thr Ile Phe Pro Phe Pro
            20                  25                  30

His Phe Ile His Gln Lys Pro Val Thr Lys Arg Gly Gln Thr Pro Gly
        35                  40                  45

Gln Gly Asn
     50


<210> 263
<211> 13
<212> PRT
<213> Homo sapiens

<400> 263
Ser Cys Ile Ser Trp Val Phe Val Met Ile Asn Gly Leu
 1               5                  10


<210> 264
<211> 61
<212> PRT
<213> Homo sapiens

<400> 264
Met Asn Ala Ser Leu Ile Ser Trp Val Leu Val Leu His Arg Ile Cys
 1               5                  10                  15
```

Leu Gly Leu Ser Asp Ile Pro Lys Glu Asn Cys Ile Ile Thr Ile Ser
            20   25   30

Gly Met Gln Leu Ser His His Gly Gln Ser Leu Gly Lys Trp Ala Glu
            35   40   45

Lys Leu His Val Phe Tyr Ser Leu Phe Ser Phe Leu Leu   .
        50.   55   60   .

<210> 265
<211> 322
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (28)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 265
Arg Ala Pro Arg Arg Thr Gly Pro Ala Ser Phe Ser Ser Arg Pro Ala
   1   5   10   15

Gly Thr Cys Ser Asp Asn Arg Val Thr Ser Phe Xaa Asp Leu Ile His
            20   25   30

Asp Gln Asp Glu Asp Glu Glu Glu Glu Glu Gly Gln Arg Phe Tyr Ala
        35   40   .   45

Gly Gly Ser Glu Arg Ser Gly Gln Gln Ile Val Gly Pro Pro Arg Lys
    50   55   60

Lys Ser Pro Asn Glu Leu Val Asp Asp Leu Phe Lys Gly Ala Lys Glu
 65   .   70   75   80

His Gly Ala Val Ala Val Glu Arg Val Thr Lys Ser Pro Gly Glu Thr
            85   90   95

Ser Lys Pro Arg Pro Phe Ala Gly Gly Gly Tyr Arg Leu Gly Ala Ala
            100   105   110

Pro Glu Glu Glu Ser Ala Tyr Val Ala Gly Glu Lys Arg Gln His Ser
        115   120   125

Ser Gln Asp Val His Val Val Leu Lys Leu Trp Lys Ser Gly Phe Ser
    130   .   135   140

Leu Asp Asn Gly Glu Leu Arg Ser Tyr Gln Asp Pro Ser Asn Ala Gln
145   150   155   160

Phe Leu Glu Ser Ile Arg Arg Gly Glu Val Pro Ala Glu Leu Arg Arg
                165   170   175

Leu Ala His Gly Gly Gln Val Asn Leu Asp Met Glu Asp His Arg Asp
            180   185   190

Glu Asp Phe Val Lys Pro Lys Gly Ala Phe Lys Ala Phe Thr Gly Glu

```
          195                 200                 205

Gly Gln Lys Leu Gly Ser Thr Ala Pro Gln Val Leu Ser Thr Ser Ser
    210                 215                 220

Pro Ala Gln Gln Ala Glu Asn Glu Ala Lys Ala Ser Ser Ser Ile Leu
225                 230                 235                 240

Ile Asp Glu Ser Glu Pro Thr Thr Asn Ile Gln Ile Arg Leu Ala Asp
                245                 250                 255

Gly Gly Arg Leu Val Gln Lys Phe Asn His Ser His Arg Ile Ser Asp
            260                 265                 270

Ile Arg Leu Phe Ile Val Asp Ala Arg Pro Ala Met Ala Ala Thr Ser
        275                 280                 285

Phe Ile Leu Met Thr Thr Phe Pro Asn Lys Glu Leu Ala Asp Glu Ser
    290                 295                 300

Gln Thr Leu Lys Glu Ala Asn Leu Leu Asn Ala Val Ile Val Gln Arg
305                 310                 315                 320

Leu Thr
```

```
<210> 266
<211> 61
<212> PRT
<213> Homo sapiens

<400> 266
Met Asn Ala Ser Leu Ile Ser Trp Val Leu Val Leu His Arg Ile Cys
  1               5                  10                  15

Leu Gly Leu Ser Asp Ile Pro Lys Glu Asn Cys Ile Ile Thr Ile Ser
            20                  25                  30

Gly Met Gln Leu Ser His His Gly Gln Ser Leu Gly Lys Trp Ala Glu
        35                  40                  45

Lys Leu His Val Phe Tyr Ser Leu Phe Ser Phe Leu Leu
    50                  55                  60
```

```
<210> 267
<211> 4
<212> PRT
<213> Homo sapiens

<400> 267
Pro Asn Ser Pro
  1
```

```
<210> 268
```

<211> 64
<212> PRT
<213> Homo sapiens

<400> 268
Met Asp Pro Lys Leu Pro Val Ile Thr Ile Ile Ile Ile Ile Ile Ala
1   5   10   15

Tyr Ala Phe Val Glu Pro Leu Leu Cys Thr Trp Pro Val Thr Gly Thr
            20   25   30

Leu Ser Val Thr Gln Met Gln Val Ser His Leu Thr Leu Ala Ser Thr
        35   40   45

Leu Arg Asp Gly Phe Tyr Gln His Pro His Phe Thr Asp Glu Glu Asn
    50   55   60

<210> 269
<211> 64
<212> PRT
<213> Homo sapiens

<400> 269
Met Asp Pro Lys Leu Pro Val Ile Thr Ile Ile Ile Ile Ile Ile Ala
1   5   10   15

Tyr Ala Phe Val Glu Pro Leu Leu Cys Thr Trp Pro Val Thr Gly Thr
            20   25   30

Leu Ser Val Thr Gln Met Gln Val Ser His Leu Thr Leu Ala Ser Thr
        35   40   45

Leu Arg Asp Gly Phe Tyr Gln His Pro His Phe Thr Asp Glu Glu Asn
    50   55   60

<210> 270
<211> 58
<212> PRT
<213> Homo sapiens

<400> 270
Met Val Ser Leu Cys Ser Gly Leu Pro Ser Ser Cys Leu Leu Leu Gly
1   5   10   15

Ser Thr Ala Ala Ile Ile Gln Arg Gln Val Cys Leu Phe Gln Gly Ala
            20   25   30

Arg Gln Trp Asn Pro Val Ser Glu Phe Leu Arg Ala His His His Cys
        35   40   45

136

Gly Asn Arg Ala Gly Leu Pro Ala Val Leu
      50   55

<210> 271
<211> 58
<212> PRT
<213> Homo sapiens

<400> 271
Met Val Ser Leu Cys Ser Gly Leu Pro Ser Ser Cys Leu Leu Leu Gly
  1   5   10   15

Ser Thr Ala Ala Ile Ile Gln Arg Gln Val Cys Leu Phe Gln Gly Ala
            20   25   30

Arg Gln Trp Asn Pro Val Ser Glu Phe Leu Arg Ala His His His Cys
        35   40   45

Gly Asn Arg Ala Gly Leu Pro Ala Val Leu
      50   55

<210> 272
<211> 122
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (19)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (73)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 272
Lys Ala Pro Ser Ser His Pro Gly Leu Thr Cys Val Ser Leu Ser Arg
  1   5   10   15

Leu Gln Xaa Ser Leu Ser Leu Cys Phe Pro Ser Gly Pro Cys Trp Ala
            20   25   30

Gly Leu Leu Ser Ser Leu Ala Leu Ala Gly Gly Ala Pro Gly Ala Leu
          35   40   45

Pro Pro Trp Gln Pro Gly Gln Asp Ser Lys Met Arg Thr Ala Glu Leu
      50   55   60

Val Gly Gly Ser His Gly Pro Ala Xaa Gly Pro Gly Glu Ala Glu Pro
  65   70   75   80

Glu Pro Thr Ala Val Val Leu Trp Thr Val Asp Pro Glu Gly Gly Leu
                85   90   95

Gly Gln Val Pro Ala Glu Gly Pro Gly Gly Leu Cys Val Pro Leu Gly

                               137

                    100   105   110

        Pro Gly Ala Leu Val Thr Trp Thr Pro Gly
                115   120

<210> 273
<211> 130
<212> PRT
<213> Homo sapiens

<400> 273
Ser Thr Cys Cys Gly Trp Gly Pro Leu Gly His Ser Arg Val Arg Gly
  1   5   10   15

Cys His Cys His Leu Gly His Val Gly Arg His Gln His Phe Val Val
            20   25   30

Thr Asn Ser Thr Val Thr Asn Ile Phe Gly Gln Ile Pro Phe Tyr Thr
        35   40   45

Ser Arg Gln Leu Leu Val Cys Asn Pro Thr Gly Gln Arg Glu Gly Pro
     50   55   60

Val Thr Trp Leu Ser His Cys Pro Ala Pro Gln Met Val Leu Gly Leu
 65   70   75   80

Leu Phe Ser Leu Gly Pro Ala Asn Thr Thr Val Phe Thr Ser Ala His
                85   90   95

Trp Leu Ser Ala Val Val Pro Gly Ser Gln Trp His Val Ser Pro Arg
            100   105   110

Ser Ser Leu Ile Pro Gln His Thr Pro Lys Gly Ser Val Ala Asn Thr
        115   120   125

Leu Asn
    130

<210> 274
<211> 44
<212> PRT
<213> Homo sapiens

<400> 274
Met Arg Leu Arg Asn Gly Thr Val Ala Thr Ala Leu Ala Phe Ile Thr
  1   5   10   15

Ser Phe Leu Thr Leu Ser Trp Tyr Thr Thr Trp Gln Asn Gly Lys Gly
            20   25   30

Lys Glu Asn Asp Ser Glu Asn Val His Glu Met Tyr
        35   40

<210> 275

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<211> 216
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (6)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (18)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 275
Cys Phe Pro Trp Gly Xaa Ala Leu Arg Gln Lys Leu Phe Pro Ser Ala
  1               5                  10                  15

Leu Xaa Ala Leu Val Pro Ser Gly Ala Gln Pro Leu Pro Ala Thr Lys
             20                  25                  30

Asp Thr Val Leu Ala Pro Leu Arg Met Ser Gln Val Arg Ser Leu Val
         35                  40                  45

Ile Gly Leu Gln Asn Leu Leu Val Gln Lys Asp Pro Leu Leu Ser Gln
     50                  55                  60

Ala Cys Val Gly Cys Leu Glu Ala Leu Leu Asp Tyr Leu Asp Ala Arg
 65                  70                  75                  80

Ser Pro Asp Ile Ala Leu His Val Ala Ser Gln Pro Trp Asn Arg Phe
                 85                  90                  95

Leu Leu Phe Thr Leu Leu Asp Ala Gly Glu Asn Ser Phe Leu Arg Pro
            100                 105                 110

Glu Ile Leu Arg Leu Met Thr Leu Phe Met Arg Tyr Arg Ser Ser Ser
            115                 120                 125

Val Leu Ser His Glu Glu Val Gly Asp Val Leu Gln Gly Val Ala Leu
    130                 135                 140

Ala Asp Leu Ser Thr Leu Ser Asn Thr Thr Leu Gln Ala Leu His Gly
145                 150                 155                 160

Phe Phe Gln Gln Leu Gln Ser Met Gly His Leu Ala Asp His Ser Met
                165                 170                 175

Ala Gln Thr Leu Gln Ala Ser Leu Glu Gly Leu Pro Pro Ser Thr Ser
            180                 185                 190

Ser Gly Gln Pro Pro Leu Gln Asp Met Leu Cys Leu Gly Gly Val Ala
        195                 200                 205

Val Ser Leu Ser His Ile Arg Asn
    210                 215

<210> 276
```

```
<211> 122
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (92)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (100)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (109)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (116)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 276
Met Leu Ala Leu Thr Leu Ala Lys Ala Asp Ser Pro Arg Thr Ala Leu
  1               5                  10                  15

Leu Cys Ser Ala Trp Leu Leu Thr Ala Ser Phe Ser Ala Gln Gln His
             20                  25                  30

Lys Gly Ser Leu Gln Val His Gln Thr Leu Ser Val Glu Met Asp Gln
         35                  40                  45

Val Leu Lys Ala Leu Ser Phe Pro Lys Lys Lys Ala Ala Leu Leu Ser
     50                  55                  60

Thr Ala Ile Leu Cys Phe Leu Arg Thr Ala Leu Arg Gln Ser Phe Ser
 65                  70                  75                  80

Ser Ala Trp Asn Pro Gly Ala Leu Lys Gly Pro Xaa Thr Ala Ala Thr
                 85                  90                  95

Lys Asp Thr Xaa Leu Thr Ser Leu Arg Met Ser Lys Xaa Gly Pro Gly
             100                 105                 110

His Trp Ala Xaa Lys Thr Ser Trp Cys Lys
         115                 120
```

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<210> 277
<211> 282
<212> PRT
<213> Homo sapiens

<400> 277
Met Leu Ala Leu Thr Leu Ala Lys Ala Asp Ser Pro Arg Thr Ala Leu
  1               5                  10                  15
```

Leu Cys Ser Ala Trp Leu Leu Thr Ala Ser Phe Ser Ala Gln Gln His
            20   25   30

Lys Gly Ser Leu Gln Val His Gln Thr Leu Ser Val Glu Met Asp Gln
            35   40   45

Val Leu Lys Ala Leu Ser Phe Pro Lys Lys Lys Ala Ala Leu Leu Ser
        50   55   60

Ala Ala Ile Leu Cys Phe Leu Arg Thr Ala Leu Arg Gln Ser Phe Ser
    65   70   75   80

Ser Ala Leu Val Ala Leu Val Pro Ser Gly Ala Gln Pro Leu Pro Ala
                85   90   95

Thr Lys Asp Thr Val Leu Ala Pro Leu Arg Met Ser Gln Val Arg Ser
            100   105   110

Leu Val Ile Gly Leu Gln Asn Leu Leu Val Gln Lys Asp Pro Leu Leu
        115   120   125

Ser Gln Ala Cys Val Gly Cys Leu Glu Ala Leu Leu Asp Tyr Leu Asp
    130   135   140

Ala Arg Ser Pro Asp Ile Ala Leu His Val Ala Ser Gln Pro Trp Asn
145   150   155   160

Arg Phe Leu Leu Phe Thr Leu Leu Asp Ala Gly Glu Asn Ser Phe Leu
                165   170   175

Arg Pro Glu Ile Leu Arg Leu Met Thr Leu Phe Met Arg Tyr Arg Ser
            180   185   190

Ser Ser Val Leu Ser His Glu Glu Val Gly Asp Val Leu Gln Gly Val
        195   200   205

Ala Leu Ala Asp Leu Ser Thr Leu Ser Asn Thr Thr Leu Gln Ala Leu
    210   215   220

His Gly Phe Phe Gln Gln Leu Gln Ser Met Gly His Leu Ala Asp His
225   230   235   240

Ser Met Ala Gln Thr Leu Gln Ala Ser Leu Glu Gly Leu Pro Pro Ser
                245   250   255

Thr Ser Ser Gly Gln Pro Pro Leu Gln Asp Met Leu Cys Leu Gly Gly
            260   265   270

Val Ala Val Ser Leu Ser His Ile Arg Asn
        275   280

<210> 278
<211> 39
<212> PRT
<213> Homo sapiens

<400> 278
Met Ala Phe Gly Gln Glu Val Thr His Leu Thr Lys Thr Ser Trp Leu

```
       1                  5                        10                       15

Ala Pro Leu Arg Phe Ile Lys Gly Leu Leu Gly Pro Trp Gly Trp Ile
                20                   25                       30

Leu Leu Ile Leu Asp Leu Glu
             35
```

<210> 279
<211> 39
<212> PRT
<213> Homo sapiens

<400> 279
```
Met Ala Phe Gly Gln Glu Val Thr His Leu Thr Lys Thr Ser Trp Leu
    1                   5                        10                       15

Ala Pro Leu Arg Phe Ile Lys Gly Leu Leu Gly Pro Trp Gly Trp Ile
                20                   25                       30

Leu Leu Ile Leu Asp Leu Glu
             35
```

<210> 280
<211> 107
<212> PRT
<213> Homo sapiens

<400> 280
```
Gly Leu Asp Val Gln Pro Val Ala Gln Gly Ser Lys Leu Thr Gln Glu
    1                   5                        10                       15

Val Arg Glu Gly Cys Leu Ala Val Ala Gly Ala Asn Gly Phe Arg Gly
                20                   25                       30

Gly Tyr Asp Gly Tyr Arg Pro Ser Phe Ser Asn Thr Pro Asn Ser Gly
             35                   40                    45

Tyr Thr Gln Ser Gln Phe Ser Ala Pro Arg Asp Tyr Ser Gly Tyr Gln
        50                   55                    60

Arg Asp Gly Tyr Gln Gln Asn Phe Lys Arg Gly Ser Gly Gln Ser Gly
    65                   70                   75                       80

Pro Arg Gly Ala Pro Arg Gly Arg Gly Gly Pro Pro Arg Pro Asn Arg
                85                   90                       95

Gly Met Pro Gln Met Asn Thr Gln Gln Val Asn
             100                  105
```

<210> 281
<211> 77
<212> PRT
<213> Homo sapiens

<400> 281
Met Gly Thr His Pro Lys Tyr Leu Glu Met Met Glu Leu Asp Ile Gly
1   5   10   15

Asp Ala Thr Gln Val Tyr Val Ala Phe Leu Val Tyr Leu Asp Leu Met
            20   25   30

Glu Ser Lys Ser Trp His Glu Val Asn Cys Val Gly Leu Pro Glu Leu
        35   40   45

Gln Leu Ile Cys Leu Val Gly Thr Glu Ile Glu Gly Glu Gly Leu Gln
    50   55   60

Thr Val Val Pro Asn Pro His His Cys Phe Pro Gln Pro
65   70   75

<210> 282
<211> 49
<212> PRT
<213> Homo sapiens

<400> 282
Met Gly Gly Thr Cys Val Leu Leu Leu Ser Ser His Thr Gln Ser Cys
1   5   10   15

Leu Phe Val Ser Cys Cys His Cys Gln Leu Ile Val Glu Thr Ala Ile
            20   25   30

Ser Phe Ser Tyr Ser Ala Leu Pro Ser Ala Phe Trp Pro Leu Gln Leu
        35   40   45

Pro

<210> 283
<211> 50
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (43)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (50)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 283
Met Asn Phe Leu Val Phe Leu Ser Leu Ser Ser Ser Leu Val Ser Ala
1   5   10   15

Ala Gly Pro Arg Phe Pro Ser Arg Glu Glu Arg Gly Val Gly Gly Val
            20   25   30

143

```
Val Leu Ile Lys Ser Glu Asp Met Thr Leu Xaa Glu Arg Ser Lys Gly
         35                  40                  45

Ser Xaa
     50


<210> 284
<211> 240
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (67)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 284
Gly Glu Gly Asp Asp Lys Glu Glu Ser Val Glu Lys Leu Asp Cys His
 1               5                  10                  15

Tyr Ser Gly His His Pro Gln Pro Ala Ser Phe Cys Thr Phe Gly Ser
             20                  25                  30

Arg Gln Ile Gly Arg Gly Tyr Tyr Val Phe Asp Ser Arg Trp Asn Arg
         35                  40                  45

Leu Arg Cys Ala Leu Asn Leu Met Val Glu Lys His Leu Asn Ala Gln
     50                  55                  60

Leu Trp Xaa Lys Ile Pro Pro Val Pro Ser Thr Thr Ser Pro Ile Ser
 65                  70                  75                  80

Thr Arg Ile Pro His Arg Thr Asn Ser Val Pro Thr Ser Gln Cys Gly
             85                  90                  95

Val Ser Tyr Leu Ala Ala Ala Thr Val Ser Thr Ser Pro Val Leu Leu
            100                 105                 110

Ser Ser Thr Cys Ile Ser Pro Asn Ser Lys Ser Val Pro Ala His Gly
            115                 120                 125

Thr Thr Leu Asn Ala Gln Pro Ala Ala Ser Gly Ala Met Asp Pro Val
        130                 135                 140

Cys Ser Met Gln Ser Arg Gln Val Ser Ser Ser Ser Ser Ser Pro Ser
145                 150                 155                 160

Thr Pro Ser Gly Leu Ser Ser Val Pro Ser Pro Met Ser Arg Lys
            165                 170                 175

Pro Gln Lys Leu Lys Ser Ser Lys Ser Leu Arg Pro Lys Glu Ser Ser
            180                 185                 190

Gly Asn Ser Thr Asn Cys Gln Asn Ala Ser Ser Ser Thr Ser Gly Gly
            195                 200                 205

Ser Gly Lys Lys Arg Lys Asn Ser Ser Pro Leu Leu Val His Ser Ser
```

                                        144

         210   215   220

Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser His Ser Met Gly Val Phe
225   230   235   240

<210> 285
<211> 43
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (7)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 285
Tyr Ser Met Val Tyr Met Xaa His Ile Phe Leu Ile Gln Ser Ile Ile
  1   5   10   15

Asp Gly His Leu Gly Trp Phe Gln Val Phe Ala Ile Val Asn Ser Ala
             20   25   30

Thr Val Asn Ile Arg Val His Val Ser Leu Trp
         35   40

<210> 286
<211> 56
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (4)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (14)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (21)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 286
Phe Ala Xaa Xaa Asp Gly Phe Gln Leu His Pro Cys Pro Xaa Lys Gly
  1   5   10   15

```
His Glu Leu Ile Xaa Phe Tyr Gly Cys Ile Val Phe His Gly Val Tyr
             20                  25                  30

Val Pro His Phe Leu Asn Leu Val Cys His Cys Trp Thr Phe Gly Leu
         35                  40                  45

Val Pro Ser Leu Cys Tyr Cys Glu
     50                  55
```

<210> 287
<211> 75
<212> PRT
<213> Homo sapiens

<400> 287
```
Met Ser Trp Leu Phe Pro Ala Thr Ile Leu Phe Glu Glu Lys Ile Cys
  1               5                  10                  15

Phe Ser Leu Phe Pro Arg Lys Leu Val Gly Gln His Gly His Tyr Ser
             20                  25                  30

Ser Cys Ala Val Thr Pro Ala Pro Arg Cys Leu Glu Leu Ser Val Leu
         35                  40                  45

Thr Phe Met His Asp Cys Lys Ala Ser Trp Ser Ile Phe Tyr Gly Ala
     50                  55                  60

Ser Val Cys Phe Arg Pro Met Thr Phe Val Arg
 65                  70                  75
```

<210> 288
<211> 75
<212> PRT
<213> Homo sapiens

<400> 288
```
Met Ser Trp Leu Phe Pro Ala Thr Ile Leu Phe Glu Glu Lys Ile Cys
  1               5                  10                  15

Phe Ser Leu Phe Pro Arg Lys Leu Val Gly Gln His Gly His Tyr Ser
             20                  25                  30

Ser Cys Ala Val Thr Pro Ala Pro Arg Cys Leu Glu Leu Ser Val Leu
         35                  40                  45

Thr Phe Met His Asp Cys Lys Ala Ser Trp Ser Ile Phe Tyr Gly Ala
     50                  55                  60

Ser Val Cys Phe Arg Pro Met Thr Phe Val Arg
 65                  70                  75
```

<210> 289
<211> 83

146

<212> PRT
<213> Homo sapiens

<400> 289
Ile Val Leu Lys Tyr Ile Met Ala Gly Cys Pro Leu Phe Leu Gly Asn
  1   5   10   15

Leu Trp Asp Val Thr Asp Arg Asp Ile Asp Arg Tyr Thr Glu Ala Leu
            20   25   30

Leu Gln Gly Trp Leu Gly Ser Arg Pro Arg Ala Pro Leu Leu Tyr Tyr
        35   40   45

Val Asn Gln Ala Arg Gln Ala Pro Arg Leu Lys Tyr Leu Ile Gly Ala
    50   55   60

Ala Pro Ile Pro Met Ala Cys Leu Ser Leu Cys Gly Asn Pro Met Glu
65   70   75   80

Leu Ser Tyr

<210> 290
<211> 223
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (132)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 290
Ala Trp Tyr Leu Leu Arg Val Gln Val Leu Gln Leu Val Ala Ala Tyr
  1   5   10   15

Leu Ser Leu Pro Ser Asn Asn Leu Ser His Ser Leu Trp Glu Gln Leu
            20   25   30

Cys Ala Gln Gly Trp Gln Thr Pro Glu Ile Ala Leu Ile Asp Ser His
        35   40   45

Lys Leu Leu Arg Ser Ile Ile Leu Leu Leu Met Gly Ser Asp Ile Leu
   50   55   60

Ser Thr Gln Lys Ala Ala Val Glu Thr Ser Phe Leu Asp Tyr Gly Glu
65   70   75   80

Asn Leu Val Gln Lys Trp Gln Val Leu Ser Glu Val Leu Ser Cys Ser
                85   90   95

Glu Lys Leu Val Cys His Leu Gly Arg Leu Gly Ser Val Ser Glu Ala
            100   105   110

Lys Ala Phe Cys Leu Glu Ala Leu Lys Leu Thr Thr Lys Leu Gln Ile
        115   120   125

Pro Arg Gln Xaa Ala Leu Phe Leu Val Leu Lys Gly Glu Leu Glu Leu

147

```
        130                    135                    140

Ala Arg Asn Asp Ile Asp Leu Cys Gln Ser Asp Leu Gln Gln Val Leu
145               150               155               160

Phe Leu Leu Glu Ser Cys Thr Glu Phe Gly Gly Val Thr Gln His Leu
                165               170               175

Asp Ser Val Lys Lys Val His Leu Gln Lys Gly Lys Gln Gln Ala Gln
            180               185               190

Val Pro Cys Pro Pro Gln Leu Pro Glu Glu Glu Leu Phe Leu Arg Gly
        195               200               205

Pro Ala Leu Glu Leu Val Pro Leu Trp Pro Arg Ser Leu Ala Pro
    210               215               220
```

<210> 291
<211> 8
<212> PRT
<213> Homo sapiens

<400> 291
```
Ala Trp Phe Leu Val Lys Pro Glu
 1                5
```

<210> 292
<211> 223
<212> PRT
<213> Homo sapiens

<400> 292
```
Ala Trp Tyr Leu Leu Arg Val Gln Val Leu Gln Leu Val Ala Ala Tyr
 1                5                10                     15

Leu Ser Leu Pro Ser Asn Asn Leu Ser His Ser Leu Trp Glu Gln Leu
            20               25               30

Cys Ala Gln Gly Trp Gln Thr Pro Glu Ile Ala Leu Ile Asp Ser His
        35               40               45

Lys Leu Leu Arg Ser Ile Ile Leu Leu Leu Met Gly Ser Asp Ile Leu
    50               55               60

Ser Thr Gln Lys Ala Ala Val Glu Thr Ser Phe Leu Asp Tyr Gly Glu
65               70               75               80

Asn Leu Val Gln Lys Trp Gln Val Leu Ser Glu Val Leu Ser Cys Ser
            85               90               95

Glu Lys Leu Val Cys His Leu Gly Arg Leu Gly Ser Val Ser Glu Ala
        100               105               110

Lys Ala Phe Cys Leu Glu Ala Leu Lys Leu Thr Thr Lys Leu Gln Ile
        115               120               125
```

```
Pro Arg Gln Cys Ala Leu Phe Leu Val Leu Lys Gly Glu Leu Glu Leu
    130                 135             140

Ala Arg Asn Asp Ile Asp Leu Cys Gln Ser Asp Leu Gln Gln Val Leu
145             150             155                 160

Phe Leu Leu Glu Ser Cys Thr Glu Phe Gly Gly Val Thr Gln His Leu
                165             170                 175

Asp Ser Val Lys Lys Val His Leu Gln Lys Gly Lys Gln Gln Ala Gln
                180             185                 190

Val Pro Cys Pro Pro Gln Leu Pro Glu Glu Glu Leu Phe Leu Arg Gly
            195             200             205

Pro Ala Leu Glu Leu Val Pro Leu Trp Pro Arg Ser Leu Ala Pro
    210             215             220
```

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<210> 293
<211> 88
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (7)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (30)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (43)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (46)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 293
Ala Asp Pro Ser Pro Ser Xaa Trp Leu Gln Thr His Arg Gly Pro Arg
  1             5               10                  15

Leu Leu Trp Pro His His Gln Gln Leu Leu Leu Ser Phe Xaa Glu Pro
            20              25                  30

Arg Lys Pro Leu Ile Leu Leu Leu Pro Val Xaa Ala Pro Xaa Ser Leu
          35              40                  45

Lys Pro His Ser Cys Ile Pro Phe Ser Leu Asp Ile Thr Pro Pro Thr
      50              55                  60

Pro Trp Leu Asn Phe Leu Pro Val Val Ala Trp Ser Phe Gly His Cys
  65              70                  75                  80
```

149

Pro Gly Leu Phe Leu Ser Pro Ser
                85

<210> 294
<211> 80
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (61)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (69)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (75)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 294
Met His His His Thr Arg Leu Val Phe Val Phe Leu Val Glu Met Gly
  1   5   10   15

Phe His His Val Gly Gln Ala Gly Leu Glu Leu Leu Thr Ser Ser Asp
            20   25   30

Leu Pro Ala Leu Ala Ser Gln Ser Ala Gly Ile Thr Gly Val Ser His
        35   40   45

Cys Ala Gln Leu Pro Phe Leu Pro Leu Lys Ser Lys Xaa Gly Trp Glu
    50   55   60

Leu Ser Pro Trp Xaa Phe Met Val Ala Lys Xaa Leu Asn Pro Val Ala
 65   70   75   80

<210> 295
<211> 18
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (4)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (14)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 295
Met Val Ala Xaa Leu Leu Ile Leu Leu Asp Ser Gly Xaa Leu Leu
  1   5   10   15

Ala Gly

<210> 296
<211> 126
<212> PRT
<213> Homo sapiens

<400> 296
Ala Thr Thr Ser Val Pro Lys Tyr Val Phe Asn Leu Asn Phe Ile Leu
  1   5   10   15

Met Cys Leu Arg Asp Glu Ser Lys Tyr Met Leu Val Thr Ser His Ser
         20   25   30

Asn Val Glu Val Gly Arg Trp Leu Pro Gly Leu Pro Ser Pro Gly Arg
         35   40   45

Ile Cys Gly Glu Gln Ser Asp Val His Pro Ser Gly Leu Phe Ser Ile
      50   55   60

Asn Asp Ser Leu Leu Asp Leu Leu Leu Gly Phe Arg Ser Lys Arg
  65   70   75   80

Gly Ile Val Val Glu Asn Ala Leu Leu Gly Glu Gly Glu Pro Glu Ile
               85   90   95

His Lys Arg Arg Leu Pro Cys Ser Phe Ala Tyr Leu Ala Ala Pro Arg
              100   105   110

Leu Gly Val Arg Ile Pro Gly Phe Pro Ser Leu Leu Cys His
           115   120   125

<210> 297
<211> 26
<212> PRT
<213> Homo sapiens

<400> 297
Met Pro Val Val Leu Phe Gln Leu Trp Leu Phe Ile Leu Lys Thr Asp
  1   5   10   15

Asn Ala Phe Ala Trp Leu Lys Ile Arg Arg
              20   25

<210> 298
<211> 136
<212> PRT

<213> Homo sapiens

<220>
<221> SITE
<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (67)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 298
```
Pro Ser Xaa Met Leu Leu Leu Trp Ala Ser Ser Leu Pro Thr Arg Cys
 1           5                   10                  15

Asp Cys Ser Phe Pro Val Thr Pro Leu Val Pro Leu Val His Val Ile
            20              25                  30

Cys Val Trp Val Met Phe Pro Ser Ala Ala Thr Ala Ala Cys His Pro
            35              40                  45

Gly Ala Gly Ala Phe Phe Ser Gln Gly Pro Ser Pro Phe Ser Arg Thr
    50                  55                  60

Trp Pro Xaa Leu Gly His Arg Glu Ile Pro Ala Glu Gly Ala Gly Glu
65                  70                  75                  80

Thr Val Ala Leu Gly Leu Gln Pro Lys Arg His Thr Leu Ala Val Gly
                85                  90                  95

Val His Gly Met Leu Ala Leu Ser Thr Val Thr Val Gly Gly Phe Gly
            100                 105                 110

Gly Phe Pro Trp Thr Ser Gly Pro Gly Cys Pro Pro Leu Ser Trp Thr
            115                 120                 125

Cys Phe Ile Phe Pro Ile Leu Thr
        130                 135
```

<210> 299
<211> 19
<212> PRT
<213> Homo sapiens

<400> 299
```
Gln Ile Trp Pro Phe Leu Pro Pro Ser Gln Pro Ser Gly Pro Leu Gln
 1           5                   10                  15

Arg Ala Val
```

<210> 300
<211> 133
<212> PRT
<213> Homo sapiens

<400> 300
```
Met Leu Leu Leu Trp Ala Ser Ser Leu Pro Thr Arg Cys Asp Cys Ser
  1               5                  10                  15

Phe Pro Val Thr Pro Leu Val Pro Leu Val His Val Ile Cys Val Trp
               20                  25                  30

Val Met Phe Pro Ser Ala Ala Thr Ala Ala Cys His Pro Gly Ala Gly
           35                  40                  45

Ala Phe Phe Ser Gln Gly Pro Ser Pro Phe Ser Arg Thr Trp Pro Leu
       50                  55                  60

Leu Gly His Arg Glu Ile Pro Ala Glu Gly Ala Gly Glu Thr Val Ala
 65                  70                  75                  80

Leu Gly Leu Gln Pro Lys Arg His Thr Leu Ala Val Gly Val His Gly
                85                  90                  95

Met Leu Ala Leu Ser Thr Val Thr Val Gly Gly Phe Gly Gly Phe Pro
               100                 105                 110

Trp Thr Ser Gly Pro Gly Cys Pro Pro Leu Ser Trp Thr Cys Phe Ile
           115                 120                 125

Phe Pro Ile Leu Thr
       130
```

<210> 301
<211> 11
<212> PRT
<213> Homo sapiens

<400> 301
```
Ser Ser Leu Lys Asn Gln Val Ser Val Ser Gln
  1               5                  10
```

<210> 302
<211> 495
<212> PRT
<213> Homo sapiens

<400> 302
```
Met Lys His Leu Trp Phe Phe Leu Leu Leu Val Ala Ala Pro Arg Trp
  1               5                  10                  15

Val Leu Ser Gln Val Glu Leu Gln Glu Ser Gly Pro Gly Leu Val Lys
               20                  25                  30

Pro Ser Gln Thr Leu Ser Leu Thr Cys Ser Val Ser Gly Val Ser Met
           35                  40                  45

Ser Arg Gly Asp Trp Ser Trp Ser Trp Val Arg Gln Val Pro Gly Lys
       50                  55                  60
```

```
Gly Leu Glu Trp Ile Gly His Ile Asp Tyr Thr Gly Lys Thr Asp Tyr
65              70              75              80

Lys Ser Ser Leu Lys Asn Gln Val Ser Ile Ser Gln Asp Thr Ala Lys
                85              90              95

Asn Gln Phe Phe Leu Arg Val Glu Ser Val Thr Ala Ala Asp Thr Ala
            100             105             110

Val Tyr Phe Cys Ala Arg Leu Phe Glu Ser Ser Gly Tyr Gly Ala Trp
        115             120             125

Leu Asp Pro Trp Gly Pro Gly Ile Leu Val Thr Val Ser Ser Ala Ser
    130             135             140

Pro Thr Ser Pro Lys Val Phe Pro Leu Ser Leu Cys Ser Thr Gln Pro
145             150             155             160

Asp Gly Asn Val Val Ile Ala Cys Leu Val Gln Gly Phe Phe Pro Gln
            165             170             175

Glu Pro Leu Ser Val Thr Trp Ser Glu Ser Gly Gln Gly Val Thr Ala
        180             185             190

Arg Asn Phe Pro Pro Ser Gln Asp Ala Ser Gly Asp Leu Tyr Thr Thr
        195             200             205

Ser Ser Gln Leu Thr Leu Pro Ala Thr Gln Cys Leu Ala Gly Lys Ser
    210             215             220

Val Thr Cys His Val Lys His Tyr Thr Asn Pro Ser Gln Asp Val Thr
225             230             235             240

Val Pro Cys Pro Val Pro Ser Thr Pro Pro Thr Pro Ser Pro Ser Thr
            245             250             255

Pro Pro Thr Pro Ser Pro Ser Cys Cys His Pro Arg Leu Ser Leu His
            260             265             270

Arg Pro Ala Leu Glu Asp Leu Leu Leu Gly Ser Glu Ala Asn Leu Thr
    275             280             285

Cys Thr Leu Thr Gly Leu Arg Asp Ala Ser Gly Val Thr Phe Thr Trp
    290             295             300

Thr Pro Ser Ser Gly Lys Ser Ala Val Gln Gly Pro Pro Asp Arg Asp
305             310             315             320

Leu Cys Gly Cys Tyr Ser Val Ser Ser Val Leu Pro Gly Cys Ala Glu
        325             330             335

Pro Trp Asn His Gly Lys Thr Phe Thr Cys Thr Ala Ala Tyr Pro Glu
        340             345             350

Ser Lys Thr Pro Leu Thr Ala Thr Leu Ser Lys Ser Gly Asn Thr Phe
    355             360             365

Arg Pro Glu Val His Leu Leu Pro Pro Pro Ser Glu Glu Leu Ala Leu
    370             375             380
```

```
Asn Glu Leu Val Thr Leu Thr Cys Leu Ala Arg Gly Phe Ser Pro Lys
385             390             395             Phe Ser Pro 400

Asp Val Leu Val Arg Trp Leu Gln Gly Ser Gln Glu Leu Pro Arg Glu
            405             410             415

Lys Tyr Leu Thr Trp Ala Ser Arg Gln Glu Pro Ser Gln Gly Thr Thr
        420             425             430

Thr Phe Ala Val Thr Ser Ile Leu Arg Val Ala Ala Glu Asp Trp Lys
        435             440             445

Lys Gly Asp Thr Phe Ser Cys Met Val Gly His Glu Ala Leu Pro Leu
        450             455             460

Ala Phe Thr Gln Lys Thr Ile Asp Arg Leu Ala Gly Lys Pro Thr His
465             470             475             480

Val Asn Val Ser Val Val Met Ala Glu Val Asp Gly Thr Cys Tyr
            485             490             495
```

<210> 303
<211> 90
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (8)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 303
```
Pro Tyr Glu Cys Lys Glu Cys Xaa Lys Ala Phe Arg Val His Val His
  1           5           Cys 10          Val His 15

Leu Thr Gln His Arg Lys Ile His Thr Asp Val Lys Pro Tyr Glu Cys
            20              25              30

Lys Glu Cys Gly Lys Thr Phe Ser Arg Ala Ser Tyr Leu Val Gln His
        35              40              45

Ser Arg Ile His Thr Gly Lys Lys Pro Tyr Glu Cys Lys Glu Cys Gly
    50              55              60

Lys Ala Phe Ser Ser Gly Ser Tyr Leu Val Gln His Gln Arg Ile His
  65              70              75              80

Thr Gly Glu Arg Pro Tyr Trp Leu Thr Tyr
            85              90
```

<210> 304
<211> 93
<212> PRT
<213> Homo sapiens

<220>

```
<221> SITE
<222> (5)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 304
Gln Arg Ile His Xaa Gly Glu Lys Pro Tyr Glu Cys Asn Lys Cys Gly
 1               5                  10                  15

Lys Ala Phe Thr Val Tyr Gly Gln Leu Ile Gly His Gln Ser Val His
            20                  25                  30

Thr Gly Glu Lys Pro Phe Glu Cys Lys Glu Cys Gly Lys Ala Phe Arg
        35                  40                  45

Leu Asn Ser Phe Leu Thr Glu His Gln Arg Val His Thr Gly Glu Lys
    50                  55                  60

Pro Phe Lys Cys Lys Lys Cys Gly Lys Thr Phe Arg Tyr Ser Ser Ala
65                  70                  75                  80

Leu Lys Val His Leu Arg Lys His Met Ser Val Ile Pro
                85                  90


<210> 305
<211> 9
<212> PRT
<213> Homo sapiens

<400> 305
Met Trp Val Cys Ser Ile Thr Asp Gln
 1               5


<210> 306
<211> 264
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (5)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (7)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (13)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (63)
<223> Xaa equals any of the naturally occurring L-amino acids
```

```
<220>
<221> SITE
<222> (88)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (170)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (171)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 306
Thr Trp Gly Lys Xaa Lys Xaa Pro Phe Ile Glu Ser Xaa Pro Gly Gly
 1               5                  10.                 15

Lys Ile Gly Trp Gly Lys Lys Gly Leu Phe Phe Leu Lys Val Asn Tyr
            20                  25                  30

Trp Gly Lys Lys Ala Phe Asn Pro Arg Gly His Ser Lys Lys Val Thr
        35                  40                  45

Phe His Gln Leu Gly Leu Lys Lys Asn Pro Phe Trp Gly Leu Xaa Lys
    50                  55                  60

Glu Val Leu Gly Lys Ala Phe Ser Thr Phe Ser Tyr Leu Val Gln His
65                  70                  75                  80

Gln Arg Ile His Thr Ser Glu Xaa Pro Tyr Glu Cys Lys Glu Cys Gly
                85                  90                  95

Lys Ala Phe Ser Thr Ser Ser Pro Leu Ala Lys His Gln Arg Ile His
            100                 105                 110

Thr Gly Glu Lys Pro Tyr Glu Cys Lys Glu Cys Gly Lys Ser Phe Thr
        115                 120                 125

Val Tyr Gly Gln Leu Thr Arg His Gln Ser Ile His Thr Gly Glu Lys
    130                 135                 140

Pro Phe Glu Cys Lys Glu Cys Gly Lys Ala Phe Arg Leu Ser Ser Phe
145                 150                 155                 160

Leu His Ala His Gln Arg Ile His Ala Xaa Xaa Lys Pro Tyr Gly Cys
                165                 170                 175

Lys Glu Cys Gly Lys Thr Phe Ser Arg Ala Ser Tyr Leu Val Gln His
            180                 185                 190

Gly Arg Leu His Thr Gly Glu Lys Pro Cys Glu Cys Lys Glu Cys Gly
        195                 200                 205

Lys Ala Phe Ser Thr Gly Ser Tyr Leu Val Gln His Gln Arg Ile His
    210                 215                 220

Thr Gly Glu Lys Pro Tyr Glu Cys Lys Glu Cys Gly Lys Ala Phe Ile
```

157

225   230   235   240

Ser Arg His Gln Leu Thr Val His Gln Arg Val His Thr Gly Glu Lys
                245   250   255

Pro Tyr Lys Cys Lys Glu Glu Gly
            260

<210> 307
<211> 9
<212> PRT
<213> Homo sapiens

<400> 307
Met Trp Val Cys Ser Ile Thr Asp Gln
  1   5

<210> 308
<211> 10
<212> PRT
<213> Homo sapiens

<400> 308
Leu Thr Tyr Leu Ala His Leu Leu Cys Phe
  1   5   10

<210> 309
<211> 10
<212> PRT
<213> Homo sapiens

<400> 309
Met Cys Ser Leu Ser Ser Glu His Leu Ala
  1   5   10

<210> 310
<211> 465
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (16)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (27)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE

<222> (44)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 310
Asn Arg Arg Asn Gly Ala Ser Gln Ile Thr Trp Cys Ser Gly Gln Xaa
1   5   10   15

Lys Ser Ser Lys Trp Ala Arg Glu Ile Gly Xaa Tyr Gln Thr Gly Val
            20   25   30

Tyr Gln Pro Gly Trp Gly Pro Gln Arg His Ala Xaa Gly Glu Ile Ala
        35   40   45

Thr Arg Ala Ile Ser Met Leu Ala Ile Leu Thr Gly Asn Val Gly Ile
    50   55   60

Asn Gly Gly Asn Ser Gly Ala Arg Glu Gly Ser Tyr Ser Leu Pro Phe
65   70   75   80

Val Arg Met Pro Thr Leu Glu Asn Pro Ile Gln Thr Ser Ile Ser Met
            85   90   95

Phe Met Trp Thr Asp Ala Ile Glu Arg Gly Pro Glu Met Thr Ala Leu
            100   105   110

Arg Asp Gly Val Arg Gly Lys Asp Lys Leu Asp Val Pro Ile Lys Met
        115   120   125

Ile Trp Asn Tyr Ala Gly Asn Cys Leu Ile Asn Gln His Ser Glu Ile
    130   135   140

Asn Arg Thr His Glu Ile Leu Gln Asp Asp Lys Lys Cys Glu Leu Ile
145   150   155   160

Val Val Ile Asp Cys His Met Thr Ser Ser Ala Lys Tyr Ala Asp Ile
            165   170   175

Leu Leu Pro Asp Cys Thr Ala Ser Glu Gln Met Asp Phe Ala Leu Asp
            180   185   190

Ala Ser Cys Gly Asn Met Ser Tyr Val Ile Phe Asn Asp Gln Val Ile
        195   200   205

Lys Pro Arg Phe Glu Cys Lys Thr Ile Tyr Glu Met Thr Ser Glu Leu
    210   215   220

Ala Lys Arg Leu Gly Val Glu Gln Gln Phe Thr Glu Gly Arg Thr Gln
225   230   235   240

Glu Glu Trp Met Arg His Leu Tyr Ala Gln Ser Arg Glu Ala Ile Pro
            245   250   255

Glu Leu Pro Thr Phe Glu Glu Phe Arg Lys Gln Gly Ile Phe Lys Lys
            260   265   270

Arg Asp Pro Gln Gly His His Val Ala Tyr Lys Ala Phe Arg Glu Asp
        275   280   285

Pro Gln Ala Asn Pro Leu Thr Thr Pro Ser Gly Lys Ile Glu Ile Tyr
    290   295   300

159

Ser Gln Ala Leu Ala Asp Ile Ala Ala Thr Trp Glu Leu Pro Glu Gly
305   310   315   320

Asp Val Ile Asp Pro Leu Pro Ile Tyr Thr Pro Gly Phe Glu Ser Tyr
            325   330   335

Gln Asp Pro Leu Asn Lys Gln Tyr Pro Leu Gln Leu Thr Gly Phe His
        340   345   350

Tyr Lys Ser Arg Val His Ser Thr Tyr Gly Asn Val Asp Val Leu Lys
        355   360   365

Ala Ala Cys Arg Gln Glu Met Trp Ile Asn Pro Leu Asp Ala Gln Lys
    370   375   380

Arg Gly Ile His Asn Gly Asp Lys Val Arg Ile Phe Asn Asp Arg Gly
385   390   395   400

Glu Val His Ile Glu Ala Lys Val Thr Pro Arg Met Met Pro Gly Val
            405   410   415

Val Ala Leu Gly Glu Gly Ala Trp Tyr Asp Pro Asp Ala Lys Arg Val
            420   425   430

Asp Lys Gly Gly Cys Ile Asn Val Leu Thr Thr Gln Arg Pro Ser Pro
        435   440   445

Leu Ala Lys Gly Asn Pro Ser His Thr Asn Leu Val Gln Val Glu Lys
    450   455   460

Val
465

<210> 311
<211> 185
<212> PRT
<213> Homo sapiens

<400> 311
Met Ala Gln Ala Asn Ser Thr Leu Gly Ala Gly Gly Trp Val Gly Asn
1   5   10   15

Gly Val Tyr Val Ser Gly Val Gln Arg Glu Tyr Asp Ala Phe Ile Thr
            20   25   30

Asn Gln Leu Arg Ala Ala Gln Thr Gln Ser Ser Gly Leu Thr Ala Arg
        35   40   45

Tyr Glu Gln Met Ser Lys Ile Asp Asn Met Leu Ser Thr Ser Thr Ser
        50   55   60

Ser Leu Ala Thr Gln Met Gln Asp Phe Phe Thr Ser Leu Gln Thr Leu
65   70   75   80

Val Ser Asn Ala Glu Asp Pro Ala Ala Arg Gln Ala Leu Ile Gly Lys
            85   90   95

Ser Glu Gly Leu Val Asn Gln Phe Lys Thr Thr Asp Gln Tyr Leu Arg
            100   105   110

Asp Gln Asp Lys Gln Val Asn Ile Ala Ile Gly Ala Ser Val Asp Gln
            115   120   125

Ile Asn Asn Tyr Ala Lys Gln Ile Ala Ser Leu Asn Asp Gln Ile Ser
            130   135   140

Arg Leu Thr Gly Val Gly Ala Gly Ala Ser Pro Asn Asn Leu Leu Asp
145   150   155   160

Gln Arg Asp Gln Leu Gly Glu Arg Ile Lys Pro Asp Cys Trp Cys Arg
                165   170   175

Ser Gln Arg Ser Gly Trp Arg His Leu
            180   185

<210> 312
<211> 56
<212> PRT
<213> Homo sapiens

<400> 312
Met Ser His Cys Ala Trp Pro Pro Leu Leu Ile Phe Ile Thr Arg Val
    1   5   10   15

Gln Trp Ala Thr Ala Thr Lys Cys Gln Phe Thr Ala Lys Ser Gly Ile
            20   25   30

Gly Leu Thr Gln Gly Cys Ser Ser Val Phe Val Lys Leu Gly Leu Phe
            35   40   45

Leu Ile Cys Pro Tyr Asp Trp Glu
        50   55

<210> 313
<211> 56
<212> PRT
<213> Homo sapiens

<400> 313
Met Ser His Cys Ala Trp Pro Pro Leu Leu Ile Phe Ile Thr Arg Val
    1   5   10   15

Gln Trp Ala Thr Ala Thr Lys Cys Gln Phe Thr Ala Lys Ser Gly Ile
            20   25   30

Gly Leu Thr Gln Gly Cys Ser Ser Val Phe Val Lys Leu Gly Leu Phe
            35   40   45

Leu Ile Cys Pro Tyr Asp Trp Glu
        50   55

```
<210> 314
<211> 42
<212> PRT
<213> Homo sapiens

<400> 314
Leu Pro Ala Arg Leu Leu Gln Arg Ser Pro Arg Arg Cys Arg Arg Arg
 1               5                  10                  15

Arg Val Pro Ser Pro Ser Leu Ala His Val Gly Arg Arg Val Gln Pro
            20                  25                  30

Cys Tyr Ser Arg Ala Pro Pro Leu Ser Ser
         35                  40
```

```
<210> 315
<211> 146
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (7)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 315
Met Ala Ala Leu Leu Leu Xaa Pro Leu Leu Leu Leu Leu Pro Leu Leu
 1               5                  10                  15

Leu Leu Lys Leu His Leu Trp Pro Gln Leu Arg Trp Leu Pro Ala Ala
            20                  25                  30

Thr Ala Ala Arg Gly Ala Leu Glu Lys Ala Ser Gly Gln Arg Arg Glu
         35                  40                  45

Pro Glu Met Gln Arg Pro Glu Ala Ala Arg Ser Leu Pro Glu Gly Thr
    50                  55                  60

Val Pro Pro Glu Val Glu Glu Pro Pro Pro Leu Cys His Leu Glu Gln
65                  70                  75                  80

Leu Trp Arg Cys Ser Ser Pro Leu Ala Gln Ser Phe Cys Gly Ser Gly
                85                  90                  95

Ser Gly Trp Pro Arg Pro Ala Cys Ala Leu Pro Leu Cys Pro Pro Pro
            100                 105                 110

Cys Ala Gly Ala Pro Cys Cys Thr Ala Ser Ala Ala Ala Ala Arg Ala
         115                 120                 125

Arg Trp Cys Trp Arg Gln Ser Phe Trp Ser Pro Trp Ser Arg Thr Cys
    130                 135                 140

Pro Pro
145
```

```
<210> 316
<211> 174
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (151)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (161)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (164)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 316
Met Ala Ala Leu Leu Leu Leu Pro Leu Leu Leu Leu Leu Pro Leu Leu
  1               5                  10                  15

Leu Leu Lys Leu His Leu Trp Pro Gln Leu Arg Trp Leu Pro Ala Asp
               20                  25                  30

Leu Ala Phe Ala Val Arg Ala Leu Cys Cys Lys Arg Ala Leu Arg Ala
           35                  40                  45

Arg Ala Leu Ala Ala Ala Ala Ala Asp Pro Glu Gly Pro Glu Gly Gly
     50                  55                  60

Cys Ser Leu Ala Trp Arg Leu Ala Glu Leu Ala Gln Gln Arg Ala Ala
 65                  70                  75                  80

His Thr Phe Leu Ile His Gly Ser Arg Arg Phe Ser Tyr Ser Glu Ala
               85                  90                  95

Glu Arg Glu Ser Asn Arg Ala Ala Arg Ala Phe Leu Arg Ala Leu Gly
               100                 105                 110

Trp Asp Trp Gly Pro Asp Gly Gly Asp Ser Gly Glu Gly Ser Ala Gly
           115                 120                 125

Glu Gly Glu Arg Ala Ala Pro Gly Ala Gly Asp Ala Ser Gly Arg Lys
     130                 135                 140

Arg Arg Gly Val Cys Arg Xaa Gly Thr Val Pro Pro Glu Gly Gly Arg
145                 150                 155                 160

Xaa Pro Pro Xaa Pro Phe Val Thr Leu Glu Ala Asn Cys Gly
               165                 170


<210> 317
<211> 119
<212> PRT
<213> Homo sapiens
```

```
<220>
<221> SITE
<222> (14)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (78)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 317
Gln Trp Gly Gly Gly Gln Leu Met Glu Leu Val Pro Leu Xaa Cys Ala
 1               5                  10                  15

Phe Pro Gly Val Gly Ser Trp Gly Trp Glu Gln Gly Lys Ala Ala Ser
            20                  25                  30

Ser Leu Gly Phe Leu Leu Cys Leu Pro Arg Val Ala Ala Asn Pro Val
            35                  40                  45

Pro Ala Gly Gly Ala Gly Met Ala Ser Cys Pro Gly Leu Trp Gln Glu
    50                  55                  60

Thr Leu Phe Pro Leu Pro Val Gly Leu Pro Arg Leu Ser Xaa Pro Phe
65                  70                  75                  80

Ser His Lys Lys Ile Trp Gly Gln Ala Arg Trp Leu Thr Pro Val Ile
                85                  90                  95

Pro Ala Leu Trp Glu Ala Glu Ala Gly Ser His Lys Val Arg Arg Ser
            100                 105                 110

Gly Pro Ser Trp Leu Ile Arg
        115


<210> 318
<211> 234
<212> PRT
<213> Homo sapiens

<400> 318
Met Ala Ala Leu Leu Leu Leu Pro Leu Leu Leu Leu Pro Leu Leu
 1               5                  10                  15

Leu Leu Lys Leu His Leu Trp Pro Gln Leu Arg Trp Leu Pro Ala Asp
            20                  25                  30

Leu Ala Phe Ala Val Arg Ala Leu Cys Cys Lys Arg Ala Leu Arg Ala
            35                  40                  45

Arg Ala Leu Ala Ala Ala Ala Asp Pro Glu Gly Pro Glu Gly Gly
    50                  55                  60

Cys Ser Leu Ala Trp Arg Leu Ala Glu Leu Ala Gln Gln Arg Ala Ala
65                  70                  75                  80

His Thr Phe Leu Ile His Gly Ser Arg Arg Phe Ser Tyr Ser Glu Ala
```

<pre>
                85   90   95

Glu Arg Glu Ser Asn Arg Ala Ala Arg Ala Phe Leu Arg Ala Leu Gly
            100   105   110

Trp Asp Trp Gly Pro Asp Gly Gly Asp Ser Gly Glu Gly Ser Ala Gly
            115   120   125

Glu Gly Glu Arg Ala Ala Pro Gly Ala Gly Asp Ala Ala Ala Gly Ser
    130   135   140

Gly Ala Glu Phe Ala Gly Gly Asp Gly Ala Ala Arg Gly Gly Gly Ala
145   150   155   160

Ala Ala Leu Cys His Leu Glu Gln Leu Trp Arg Cys Ser Ser Pro Leu
            165   170   175

Ala Gln Ser Phe Cys Gly Ser Gly Ser Gly Trp Pro Arg Pro Ala Cys
            180   185   190

Ala Leu Pro Leu Cys Pro Pro Pro Cys Ala Gly Ala Pro Cys Cys Thr
            195   200   205

Ala Ser Ala Ala Ala Ala Arg Ala Arg Trp Cys Trp Arg Gln Ser Phe
    210   215   220

Trp Ser Pro Trp Ser Arg Thr Cys Pro Pro
225   230
</pre>

<210> 319
<211> 683
<212> PRT
<213> Homo sapiens

<400> 319

<pre>
Met Ala Ala Leu Leu Leu Leu Pro Leu Leu Leu Leu Pro Leu Leu
  1   5   10   15

Leu Leu Lys Leu His Leu Trp Pro Gln Leu Arg Trp Leu Pro Ala Asp
            20   25   30

Leu Ala Phe Ala Val Arg Ala Leu Cys Cys Lys Arg Ala Leu Arg Ala
            35   40   45

Arg Ala Leu Ala Ala Ala Ala Asp Pro Glu Gly Pro Glu Gly Gly
    50   55   60

Cys Ser Leu Ala Trp Arg Leu Ala Glu Leu Ala Gln Gln Arg Ala Ala
65   70   75   80

His Thr Phe Leu Ile His Gly Ser Arg Arg Phe Ser Tyr Ser Glu Ala
            85   90   95

Glu Arg Glu Ser Asn Arg Ala Ala Arg Ala Phe Leu Arg Ala Leu Gly
            100   105   110

Trp Asp Trp Gly Pro Asp Gly Gly Asp Ser Gly Glu Gly Ser Ala Gly
            115   120   125
</pre>

                                    165

```
Glu Gly Glu Arg Ala Ala Pro Gly Ala Gly Asp Ala Ala Ala Gly Ser
    130             135             140
Gly Ala Glu Phe Ala Gly Gly Asp Gly Ala Ala Arg Gly Gly Gly Ala
145             150             155             160
Ala Ala Pro Leu Ser Pro Gly Ala Thr Val Ala Leu Leu Leu Pro Ala
            165             170             175
Gly Pro Glu Phe Leu Trp Leu Trp Phe Gly Leu Ala Lys Ala Gly Leu
            180             185             190
Arg Thr Ala Phe Val Pro Thr Ala Leu Arg Arg Gly Pro Leu Leu His
        195             200             205
Cys Leu Arg Ser Cys Gly Ala Arg Ala Leu Val Leu Ala Pro Glu Phe
    210             215             220
Leu Glu Ser Leu Glu Pro Asp Leu Pro Ala Leu Arg Ala Met Gly Leu
225             230             235             240
His Leu Trp Ala Ala Gly Pro Gly Thr His Pro Ala Gly Ile Ser Asp
            245             250             255
Leu Leu Ala Glu Val Ser Ala Glu Val Asp Gly Pro Val Pro Gly Tyr
            260             265             270
Leu Ser Ser Pro Gln Ser Ile Thr Asp Thr Cys Leu Tyr Ile Phe Thr
    275             280             285
Ser Gly Thr Thr Gly Leu Pro Lys Ala Ala Arg Ile Ser His Leu Lys
    290             295             300
Ile Leu Gln Cys Gln Gly Phe Tyr Gln Leu Cys Gly Val His Gln Glu
305             310             315             320
Asp Val Ile Tyr Leu Ala Leu Pro Leu Tyr His Met Ser Gly Ser Leu
            325             330             335
Leu Gly Ile Val Gly Cys Met Gly Ile Gly Ala Thr Val Val Leu Lys
            340             345             350
Ser Lys Phe Ser Ala Gly Gln Phe Trp Glu Asp Cys Gln Gln His Arg
    355             360             365
Val Thr Val Phe Gln Tyr Ile Gly Glu Leu Cys Arg Tyr Leu Val Asn
    370             375             380
Gln Pro Pro Ser Lys Ala Glu Arg Gly His Lys Val Arg Leu Ala Val
385             390             395             400
Gly Ser Gly Leu Arg Pro Asp Thr Trp Glu Arg Phe Val Arg Arg Phe
            405             410             415
Gly Pro Leu Gln Val Leu Glu Thr Tyr Gly Leu Thr Glu Gly Asn Val
            420             425             430
Ala Thr Ile Asn Tyr Thr Gly Gln Arg Gly Ala Val Gly Arg Ala Ser
            435             440             445
```

166

Trp Leu Tyr Lys His Ile Phe Pro Phe Ser Leu Ile Arg Tyr Asp Val
    450   455   460

Thr Thr Gly Glu Pro Ile Arg Asp Pro Gln Gly His Cys Met Ala Thr
465   470   475   480

Ser Pro Gly Glu Pro Gly Leu Leu Val Ala Pro Val Ser Gln Gln Ser
            485   490   495

Pro Phe Leu Gly Tyr Ala Gly Gly Pro Glu Leu Ala Gln Gly Lys Leu
        500   505   510

Leu Lys Asp Val Phe Arg Pro Gly Asp Val Phe Phe Asn Thr Gly Asp
        515   520   525

Leu Leu Val Cys Asp Asp Gln Gly Phe Leu Arg Phe His Asp Arg Thr
    530   535   540

Gly Asp Thr Phe Arg Trp Lys Gly Glu Asn Val Ala Thr Thr Glu Val
545   550   555   560

Ala Glu Val Phe Glu Ala Leu Asp Phe Leu Gln Glu Val Asn Val Tyr
            565   570   575

Gly Val Thr Val Pro Gly His Glu Gly Arg Ala Gly Met Ala Ala Leu
        580   585   590

Val Leu Arg Pro Pro His Ala Leu Asp Leu Met Gln Leu Tyr Thr His
    595   600   605

Val Ser Glu Asn Leu Pro Pro Tyr Ala Arg Pro Arg Phe Leu Arg Leu
    610   615   620

Gln Glu Ser Leu Ala Thr Thr Glu Thr Phe Lys Gln Gln Lys Val Arg
625   630   635   640

Met Ala Asn Glu Gly Phe Asp Pro Ser Thr Leu Ser Asp Pro Leu Tyr
            645   650   655

Val Leu Asp Gln Ala Val Gly Ala Tyr Leu Pro Leu Thr Thr Ala Arg
        660   665   670

Tyr Ser Ala Leu Leu Ala Gly Asn Leu Arg Ile
        675   680

<210> 320
<211> 162
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (157)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 320
Met Gly Pro Arg Phe Thr Met Leu Leu Ala Met Trp Leu Val Cys Gly

```
        1                    5                          10                         15
```

Ser Glu Pro His Pro His Ala Thr Ile Arg Gly Ser His Gly Gly Arg
                20   25   30

Lys Val Pro Leu Val Ser Pro Asp Ser Ser Arg Pro Ala Arg Phe Leu
            35   40   45

Arg His Thr Gly Arg Ser Arg Gly Ile Glu Arg Ser Thr Leu Glu Glu
        50   55   60

Pro Asn Leu Gln Pro Leu Gln Arg Arg Arg Ser Val Pro Val Leu Arg
65   70   75   80

Leu Ala Arg Pro Thr Glu Pro Pro Ala Arg Ser Asp Ile Asn Gly Ala
                85   90   95

Ala Val Arg Pro Glu Gln Arg Pro Ala Ala Arg Gly Ser Pro Arg Glu
            100   105   110

Met Ile Arg Asp Glu Gly Ser Ser Ala Arg Ser Arg Met Leu Arg Phe
        115   120   125

Pro Ser Gly Ser Ser Ser Pro Asn Ile Leu Ala Ser Phe Ala Gly Lys
    130   135   140

Asn Arg Val Trp Val Ile Ser Ser Pro His Ala Ser Xaa Gly Tyr Tyr
145   150   155   160

Arg Leu

<210> 321
<211> 509
<212> PRT
<213> Homo sapiens

<400> 321
Met Thr Trp Arg Met Gly Pro Arg Phe Thr Met Leu Leu Ala Met Trp
    1   5   10   15

Leu Val Cys Gly Ser Glu Pro His Pro His Ala Thr Ile Arg Gly Ser
                20   25   30

His Gly Gly Arg Lys Val Pro Leu Val Ser Pro Asp Ser Ser Arg Pro
        35   40   45

Ala Arg Phe Leu Arg His Thr Gly Arg Ser Arg Gly Ile Glu Arg Ser
        50   55   60

Thr Leu Glu Glu Pro Asn Leu Gln Pro Leu Gln Arg Arg Arg Ser Val
65   70   75   80

Pro Val Leu Arg Leu Ala Arg Pro Thr Glu Pro Pro Ala Arg Ser Asp
                85   90   95

Ile Asn Gly Ala Ala Val Arg Pro Glu Gln Arg Pro Ala Ala Arg Gly
            100   105   110
```

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Ser Pro Arg Glu Met Ile Arg Asp Glu Gly Ser Ser Ala Arg Ser Arg
        115   120   125

Met Leu Arg Phe Pro Ser Gly Ser Ser Ser Pro Asn Ile Leu Ala Ser
        130   135   140

Phe Ala Gly Lys Asn Arg Val Trp Val Ile Ser Ala Pro His Ala Ser
145   150   155   160

Glu Gly Tyr Tyr Arg Leu Met Met Ser Leu Leu Lys Asp Asp Val Tyr
                165   170   175

Cys Glu Leu Ala Glu Arg His Ile Gln Gln Ile Val Leu Phe His Gln
            180   185   190

Ala Gly Glu Glu Gly Gly Lys Val Arg Arg Ile Thr Ser Glu Gly Gln
        195   200   205

Ile Leu Glu Gln Pro Leu Asp Pro Ser Leu Ile Pro Lys Leu Met Ser
    210   215   220

Phe Leu Lys Leu Glu Lys Gly Lys Phe Gly Met Val Leu Leu Lys Lys
225   230   235   240

Thr Leu Gln Val Glu Glu Arg Tyr Pro Tyr Pro Val Arg Leu Glu Ala
            245   250   255

Met Tyr Glu Val Ile Asp Gln Gly Pro Ile Arg Arg Ile Glu Lys Ile
        260   265   270

Arg Gln Lys Gly Phe Val Gln Lys Cys Lys Ala Ser Gly Val Glu Gly
        275   280   285

Gln Val Val Ala Glu Gly Asn Asp Gly Gly Gly Gly Ala Gly Arg Pro
    290   295   300

Ser Leu Gly Ser Glu Lys Lys Lys Glu Asp Pro Arg Arg Ala Gln Val
305   310   315   320

Pro Pro Thr Arg Glu Ser Arg Val Lys Val Leu Arg Lys Leu Ala Ala
            325   330   335

Thr Ala Pro Ala Phe Pro Gln Pro Pro Ser Thr Pro Arg Ala Thr Thr
            340   345   350

Leu Pro Pro Ala Pro Ala Thr Thr Val Thr Arg Ser Thr Ser Arg Ala
        355   360   365

Val Thr Val Ala Ala Arg Pro Met Thr Thr Thr Ala Phe Pro Thr Thr
    370   375   380

Gln Arg Pro Trp Thr Pro Ser Pro Ser His Arg Pro Pro Thr Thr Thr
385   390   395   400

Glu Val Ile Thr Ala Arg Arg Pro Ser Val Ser Glu Asn Leu Tyr Pro
            405   410   415

Pro Ser Arg Lys Asp Gln His Arg Glu Arg Pro Gln Thr Thr Arg Arg
        420   425   430

                                169

```
Pro Ser Lys Ala Thr Ser Leu Glu Ser Phe Thr Asn Ala Pro Pro Thr
        435                 440                 445

Thr Ile Ser Glu Pro Ser Thr Arg Ala Ala Gly Pro Gly Arg Phe Arg
    450                 455                 460

Asp Asn Arg Met Asp Arg Arg Glu His Gly His Arg Asp Pro Asn Val
465             470                 475                 480

Val Pro Gly Pro Pro Lys Pro Ala Lys Glu Lys Pro Pro Lys Lys Lys
            485                 490                 495

Ala Gln Asp Lys Ile Leu Ser Asn Glu Tyr Glu Glu Val
        500                 505
```

```
<210> 322
<211> 68
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (5)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 322
Pro Pro His Leu Xaa Ser Phe Glu Phe Leu Lys Asn Val Gln Leu Arg
  1               5                 10                  15

Pro Asp Thr Val Ala His Thr Cys Asp Pro Gly Thr Leu Gly Gly Arg
            20                  25                  30

Gly Trp Trp Ile Thr Gly Ser Gly Asp Arg Asp Ile Leu Ala Asn Thr
        35                  40                  45

Val Lys Arg Arg Leu Tyr Arg Lys Cys Arg Arg Leu Ala Gly His Gly
    50                  55                  60

Gly Gly Arg Leu
  65
```

```
<210> 323
<211> 58
<212> PRT
<213> Homo sapiens

<400> 323
Met Pro Asn Gln Phe Trp Lys Leu His Ile Leu Leu Phe Leu Leu Phe
  1               5                 10                  15

Phe Leu Phe Pro Leu Val Gln Leu Cys Ile Phe Ile Leu Ile Ser Asn
            20                  25                  30

Lys Glu Lys Lys Asn Val Cys Thr Leu Arg Lys Thr Tyr Ile Val Arg
        35                  40                  45
```

```
His Phe Leu Trp Leu Arg Ser Phe Gln Val
    50                  55
```

```
<210> 324
<211> 58
<212> PRT
<213> Homo sapiens

<400> 324
Met Gln Val Phe Ser Ala Leu Leu Tyr Ser Leu Met His Phe Tyr Leu
 1               5                  10                  15

Pro Ser Phe Thr Leu Glu Met Tyr Leu Asn Thr Leu Leu Ser His Asp
            20                  25.                 30

Leu Leu Ser Phe Phe His Cys Ser Gly Leu Val Phe Phe Val Tyr Phe
        35                  40                  45

Lys Ser Val Thr Gly Leu Phe Ser Gly Val
    50                  55
```

```
<210> 325
<211> 1
<212> PRT
<213> Homo sapiens

<400> 325
Ile
 1
```

```
<210> 326
<211> 7
<212> PRT
<213> Homo sapiens

<400> 326
Ile Phe Thr Cys Val Leu Tyr
 1               5
```

```
<210> 327
<211> 41
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (16)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 327
Gln Thr Val Ser Ala Phe Leu Pro Pro Leu Phe Tyr Val Thr Phe Xaa
```

```
       1                5                    10                  15

Leu Gly Lys Ile Asn Tyr Thr Lys Tyr His Ile Ile Pro Ser Tyr Lys
            20            .         25              30

Leu Leu Pro Glu Asn Lys Ser Cys Val
        35          .       40
```

<210> 328
<211> 58
<212> PRT
<213> Homo sapiens

<400> 328
```
Met Gln Val Phe Ser Ala Leu Leu Tyr Ser Leu Met His Phe Tyr Leu
   1                5                    10                  15

Pro Ser Phe Thr Leu Glu Met Tyr Leu Asn Thr Leu Leu Ser His Asp
            20            .         25              ·30

Leu Leu Ser Phe Phe His Cys Ser Gly Leu Val Phe Phe Val Tyr Phe
            35              40                     45

Lys Ser Val Thr Gly Leu Phe Ser Gly Val
        50              55
```

<210> 329
<211> 14
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (7)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 329
```
Met Met Pro Ala Tyr Pro Xaa Leu Leu Ala Trp Ile Leu Phe
   1         .       5                    10
```

<210> 330
<211> 32
<212> PRT
<213> Homo sapiens

<400> 330
```
Ala Trp Ser His Leu Ser Ile Leu Leu Asn Tyr Lys Leu Gln Arg Gln
   1                5                    10                  15

Glu Trp His Leu Phe Thr Tyr Phe Glu Phe Val Cys Asn Cys Leu Asp
            20            .         25              30
```

```
<210> 331
<211> 188
<212> PRT
<213> Homo sapiens

<400> 331
Met Glu Pro Ser Leu Val His Ile Leu Val Trp Val Ser Val Pro Pro
  1               5                  10                  15

Leu Phe Leu Cys Leu Thr His Ser Arg Ser Ile Asn His Asn Gln Asp
               20                  25                  30

Gly Leu Asn Leu Thr Pro Leu Leu Gln Met Pro His Gln Leu Thr Asp
               35                  40                  45

Ala Ser Gly Val Ile Lys Ala Pro Ala Cys His Pro Thr Val Asn Thr
        50                  55                  60

Asn Pro His Lys Glu Asn Glu His Ala Phe Leu Phe Ala Gly Cys Cys
 65                  70                  75                  80

Thr His Ser Leu Asn Arg Val Gly Thr Trp Val Pro Pro Leu Phe Lys
               85                  90                  95

Val Phe Arg Phe Leu Leu Arg Gly Thr Ser Ala Ile Ala Thr Phe Ser
              100                 105                 110

Gly His Phe Phe Ser Asp Glu Ala Phe Tyr Pro Gly Glu Pro Gly Arg
              115                 120                 125

Leu Gln Gly Asn Gly Val Pro Trp Gln Leu Thr Val Thr Gly Gln Gly
        130                 135                 140

Phe Asp Tyr Asp Lys Glu Asp Lys Arg Arg Glu Ala Pro His Gly Leu
145                 150                 155                 160

Trp Leu Gln His Tyr Arg Ala Ala Arg Asp Pro Arg Ala Trp Val Ser
               165                 170                 175

Trp Trp Ser Thr Phe Cys Asp Pro Gly Glu Glu Pro
               180                 185


<210> 332
<211> 188
<212> PRT
<213> Homo sapiens

<400> 332
Met Glu Pro Ser Leu Val His Ile Leu Val Trp Val Ser Val Pro Pro
  1               5                  10                  15

Leu Phe Leu Cys Leu Thr His Ser Arg Ser Ile Asn His Asn Gln Asp
               20                  25                  30

Gly Leu Asn Leu Thr Pro Leu Leu Gln Met Pro His Gln Leu Thr Asp
```

```
              35                      40                      45 .
  Ala Ser Gly Val Ile Lys Ala Pro Ala Cys His Pro Thr Val Asn Thr
         50              55              60

  Asn Pro His Lys Glu Asn Glu His Ala Phe Leu Phe Ala Gly Cys Cys
      65              70              75              80

  Thr His Ser Leu Asn Arg Val Gly Thr Trp Val Pro Pro Leu Phe Lys
                  85              90              95

  Val Phe Arg Phe Leu Leu Arg Gly Thr Ser Ala Ile Ala Thr Phe Ser
              100             105             110

  Gly His Phe Phe Ser Asp Glu Ala Phe Tyr Pro Gly Glu Pro Gly Arg
          115             120             125

  Leu Gln Gly Asn Gly Val Pro Trp Gln Leu Thr Val Thr Gly Gln Gly
      130             135             140

  Phe Asp Tyr Asp Lys Glu Asp Lys Arg Arg Glu Ala Pro His Gly Leu
  145             150             155             160

  Trp Leu Gln His Tyr Arg Ala Ala Arg Asp Pro Arg Ala Trp Val Ser
              165             170             175

  Trp Trp Ser Thr Phe Cys Asp Pro Gly Glu Glu Pro
              180             185
```

```
<210> 333
<211> 44
<212> PRT
<213> Homo sapiens

<400> 333
Met Leu Cys Val Cys Val Leu Trp Met Phe Thr Val Pro Gly Ser Arg
  1               5                   10                  15

Lys Asp Val Gly Glu Ala Ala Pro Ala Ser Gly Thr Gly Gln Glu Cys
          20                  25                  30

Arg Met His Gly Ser Trp Ser Gly Arg Ser Leu Gly
          35                  40
```

```
<210> 334
<211> 44
<212> PRT
<213> Homo sapiens

<400> 334
Met Leu Cys Val Cys Val Leu Trp Met Phe Thr Val Pro Gly Ser Arg
  1               5                   10                  15

Lys Asp Val Gly Glu Ala Ala Pro Ala Ser Gly Thr Gly Gln Glu Cys
          20                  25                  30
```

174

```
Arg Met His Gly Ser Trp Ser Gly Arg Ser Leu Gly
        35              40
```

```
<210> 335
<211> 249
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (147)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (150)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (196)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (222)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 335
Met Val Cys Val Phe Met Cys Ile Val Gly Val Cys Val Ala Cys Cys
  1           5               10              15

Ala Cys Val Tyr Cys Gly Cys Leu Leu Ser Arg Ala Val Glu Arg Thr
            20              25              30

Ser Gly Lys Gln Pro Gln His Gln Gly Gln Ala Arg Ser Ala Glu Cys
        35              40              45

Met Glu Ala Gly Gln Val Gly Ala Trp Asp Glu Gly Ser Thr Glu Met
    50              55              60

Gln Gly Cys Gln Gly Pro Trp Asn Gln Glu Pro Met Ile Lys Ala Thr
 65              70              75              80

Val His Thr Ala Leu Glu Ala Lys Asp Ile Phe Ile Ser Gln Gly Leu
            85              90              95

Lys Ser Met Gly Gln Gly Trp Ala Pro Gly Gln Asp Trp Gly Tyr Arg
        100             105             110

Val Asp Gln Ser Pro Ser Leu Pro Pro Gly Ala Tyr Pro His Pro Phe
        115             120             125

Thr Ser Gln Val Ser Pro Pro Gln Pro Leu Gly Glu Leu Leu Leu Ile
    130             135             140

Pro Gln Xaa Val Ala Xaa Val Thr Leu Leu Pro Glu Ala Ser Pro His
145             150             155             160
```

175

```
Pro Leu Lys His Pro Leu Pro Ala Ala His Leu Gln His Ser Gln Arg
             165             170             175

Ala Pro Trp Pro Val Ser Thr Gly Leu Ser Leu Leu Gly Gly Ala Gly
             180             185             190

Ala Glu Gln Xaa Pro Gly Leu Gly Val Pro Ala Pro Arg Ser Thr Pro
         195             200             205

Ser Pro Thr Ala Ser Leu Phe Asn Leu Arg Gln Ala Val Xaa Leu Leu
     210             215             220

Ser Leu Thr Phe Pro Leu Cys Lys Met Arg Glu Gly Thr Ala Pro Ser
225             230             235             240

Lys Pro Ser Phe Ser Leu Lys Pro Leu
             245
```

```
<210> 336
<211> 42
<212> PRT
<213> Homo sapiens

<400> 336
Met Lys Ile Val Thr Thr Leu Tyr Cys Leu Phe Val Phe Leu Leu Asn
 1               5               10               15

Cys Phe Gly Val Gly Gly Ser Cys Ile Phe Leu Ser Asn Arg Thr Pro
             20               25               30

Gly Phe Ser Trp Ala His Asp Cys Pro Gln
         35               40
```

```
<210> 337
<211> 42
<212> PRT
<213> Homo sapiens

<400> 337
Met Lys Ile Val Thr Thr Leu Tyr Cys Leu Phe Val Phe Leu Leu Asn
 1               5               10               15

Cys Phe Gly Val Gly Gly Ser Cys Ile Phe Leu Ser Asn Arg Thr Pro
             20               25               30

Gly Phe Ser Trp Ala His Asp Cys Pro Gln
         35               40
```

```
<210> 338
<211> 42
<212> PRT
<213> Homo sapiens
```

<400> 338
Met Lys Ile Val Thr Thr Leu Tyr Cys Leu Phe Val Phe Leu Leu Asn
 1   5   10   15

Cys Phe Gly Val Gly Gly Ser Cys Ile Phe Leu Ser Asn Arg Thr Pro
             20   25   30

Gly Phe Ser Trp Ala His Asp Cys Pro Gln
         35   40

<210> 339
<211> 82
<212> PRT
<213> Homo sapiens

<400> 339
Leu Leu Ser Asp Val Cys Pro Ser Leu Thr Val Pro Cys Ser Ser His
 1   5   10   15

Val Phe Thr Asp Cys Leu Leu Tyr Met Gln Ser Gln Arg Val Gly Pro
             20   25   30

Gly Leu Glu Leu Ser Pro His Leu Pro Leu Leu Ala Pro Pro Ser Ser
         35   40   45

Trp Ala Leu Ser Ser Asn Thr Val Ile Leu Ser Pro Thr Trp Leu Ile
     50   55   60

Leu Ser Phe Leu Pro Ser Asn Gly His Leu Gln Lys Lys Lys Lys Lys
 65   70   75   80

Thr Arg

<210> 340
<211> 265
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (112)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (113)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (193)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE

<222> (222)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (238)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (258)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 340
Met Asp Leu Leu Gln Phe Leu Ala Phe Leu Phe Val Leu Leu Leu Ser
 1   5   10   15

Gly Met Gly Ala Thr Gly Thr Leu Arg Thr Ser Leu Asp Pro Ser Leu
                20   25   30

Glu Ile Tyr Lys Lys Met Phe Glu Val Lys Arg Arg Glu Gln Leu Leu
            35   40   45

Ala Leu Lys Asn Leu Ala Gln Leu Asn Asp Ile His Gln Gln Tyr Lys
        50   55   60

Ile Leu Asp Val Met Leu Lys Gly Leu Phe Lys Val Leu Glu Asp Ser
65   70   75   80

Arg Thr Val Leu Thr Ala Ala Asp Val Leu Pro Asp Gly Pro Phe Pro
                85   90   95

Gln Asp Glu Lys Leu Lys Asp Ala Phe Ser His Val Val Glu Asn Xaa
            100   105   110

Xaa Phe Phe Gly Asp Val Val Leu Arg Phe Pro Lys Ile Val His Tyr
    115   120   125

Tyr Phe Asp His Asn Ser Asn Trp Asn Leu Leu Ile Arg Trp Gly Ile
    130   135   140

Ser Phe Cys Asn Gln Thr Gly Val Phe Asn Gln Gly Pro His Ser Pro
145   150   155   160

Ile Leu Ser Leu Met Ala Gln Glu Leu Gly Ile Ser Glu Lys Asp Ser
                165   170   175

Asn Phe Gln Asn Pro Phe Lys Ile Asp Arg Thr Glu Phe Ile Pro Ser
            180   185   190

Xaa Asp Pro Phe Gln Lys Ala Leu Arg Glu Glu Glu Lys Arg Arg Lys
    195   200   205

Lys Glu Glu Lys Arg Lys Glu Ile Arg Lys Gly Pro Lys Xaa Leu Pro
    210   215   220

Asp Ser His Leu Glu Leu Leu Gly Pro Trp Ser Ser Phe Xaa Val Gln
225   230   235   240

Gly Ala Thr Arg Arg Gln Val Arg Glu Gly Arg Arg Gly Trp Ser Phe

```
                   245                      250                      255

Gly Xaa Trp Leu Glu Glu Ala Pro Phe
            260                  265



<210> 341
<211> 229
<212> PRT
<213> Homo sapiens

<400> 341
Met Asp Leu Leu Gln Phe Leu Ala Phe Leu Phe Val Leu Leu Leu Ser
  1               5                  10                  15

Gly Met Gly Ala Thr Gly Thr Leu Arg Thr Ser Leu Asp Pro Ser Leu
            20                  25                  30

Glu Ile Tyr Lys Lys Met Phe Glu Val Lys Arg Arg Glu Gln Leu Leu
        35                  40                  45

Ala Leu Lys Asn Leu Ala Gln Leu Asn Asp Ile His Gln Gln Tyr Lys
    50                  55                  60

Ile Leu Asp Val Met Leu Lys Gly Leu Phe Lys Val Leu Glu Asp Ser
65                  70                  75                  80

Arg Thr Val Leu Thr Ala Ala Asp Val Leu Pro Asp Gly Pro Cys Pro
                85                  90                  95

Gln Asp Glu Lys Leu Lys Asp Ala Phe Ser His Val Val Glu Asn Thr
            100                 105                 110

Ala Phe Phe Gly Asp Val Val Leu Arg Phe Pro Arg Ile Val His Tyr
        115                 120                 125

Tyr Phe Asp His Asn Ser Asn Trp Asn Leu Leu Ile Arg Trp Gly Ile
    130                 135                 140

Ser Phe Cys Asn Gln Thr Gly Val Phe Asn Gln Gly Pro His Ser Pro
145                 150                 155                 160

Ile Leu Ser Leu Met Ala Gln Glu Leu Gly Ile Ser Glu Lys Asp Ser
                165                 170                 175

Asn Phe Gln Asn Pro Phe Lys Ile Asp Arg Thr Glu Phe Ile Pro Ser
            180                 185                 190

Thr Asp Pro Phe Gln Lys Ala Leu Arg Glu Glu Glu Lys Arg Arg Lys
        195                 200                 205

Lys Glu Glu Lys Arg Lys Glu Ile Arg Lys Gly Pro Arg Ile Ser Arg
    210                 215                 220

Ser Gln Ser Glu Leu
225
```

```
<210> 342
<211> 88
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (1)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (2)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (19)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 342
Xaa Xaa Glu Asp Arg Leu Pro Gly Pro Ile Leu Pro Arg Gly Phe Gln
  1               5                  10                  15

Leu Trp Xaa Ser Leu Gly Gly Glu Phe Pro Arg Leu Gln Ile Arg Pro
             20                  25                  30

Met Cys His Ala Pro Asn Cys Leu Ser Val Arg Pro Ser Val Arg Pro
         35                  40                  45

Ser Val His Pro Ser Ile His Pro Ser Ile Pro Val Thr Ile Ser Thr
     50                  55                  60

Pro Met Cys Gln Met Pro Tyr Ile Ser Asn Leu Met Gln Val Pro Pro
 65                  70                  75                  80

Pro Pro Cys Pro Leu Leu Ile Gln
                 85
```

```
<210> 343
<211> 162
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (138)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (152)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 343
Met Arg Pro Arg Gly Leu Pro Pro Leu Leu Val Val Leu Leu Gly Cys
  1               5                  10                  15
```

Trp Ala Ser Val Ser Ala Gln Thr Asp Ala Thr Pro Ala Val Thr Thr
                20   25   30

Glu Gly Leu Asn Ser Thr Glu Ala Ala Leu Ala Thr Phe Gly Thr Phe
        35   40   45

Pro Ser Thr Arg Pro Pro Gly Thr Pro Arg Ala Pro Gly Pro Ser Ser
    50   55   60

Gly Pro Arg Pro Thr Pro Val Thr Asp Val Ala Val Leu Cys Val Cys
65   70   75   80

Asp Leu Ser Pro Ala Gln Cys Asp Ile Asn Cys Cys Cys Asp Pro Asp
            85   90   95

Cys Ser Ser Val Asp Phe Ser Val Phe Ser Ala Cys Ser Val Pro Val
            100   105   110

Val Thr Gly Asp Ser Gln Phe Cys Ser Gln Lys Ala Val Ile Tyr Ser
    115   120   125

Leu Asn Phe Thr Ala Asn Pro Pro Gln Xaa Val Phe Glu Leu Val Asp
    130   135   140

Gln Ile Asn Pro Ser Ile Phe Xaa Ile His Ile Thr Asn Cys Arg Cys
145   150   155   160

Ser Val

<210> 344
<211> 274
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (56)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 344
Pro Phe Tyr Ser Ser Pro Glu Ile Leu Arg Val Pro Asp Ser Arg Lys
  1   5   10   15

Lys Val Pro Ile Thr Val Gln Ser Ile Val Ile Gln Ser Leu Asn Lys
                20   25   30

Thr Leu Thr Arg Arg Glu Asp Thr Asp Val Leu Gln Pro Thr Leu Val
        35   40   45

Asn Ala Gly His Phe Ser Leu Xaa Val Asn Val Val Leu Glu Val Lys
    50   55   60

Tyr Ser Leu Thr Tyr Thr Asp Ala Gly Glu Val Thr Lys Ala Asp Leu
65   70   75   80

Ser Phe Val Leu Gly Thr Val Ser Ser Val Val Val Pro Leu Gln Gln
                85   90   95

181

```
Lys Phe Glu Ile His Phe Leu Gln Glu Asn Thr Gln Pro Val Pro Leu
            100                 105                 110

Ser Gly Asn Pro Gly Tyr Val Val Gly Leu Pro Leu Ala Ala Gly Phe
            115                 120                 125

Gln Pro His Lys Gly Gly Ala Leu Pro Cys Gln Leu Val Ala Gln Lys
    130                 135                 140

Val Lys Ser Leu Leu Trp Gly Gln Gly Phe Pro Asp Tyr Val Ala Pro
145                 150                 155                 160

Phe Gly Asn Ser Gln Ala Gln Asp Met Leu Asp Trp Val Pro Ile His
                165                 170                 175

Phe Ile Thr Gln Ser Phe Asn Arg Lys Asp Ser Cys Gln Leu Pro Gly
            180                 185                 190

Ala Leu Val Ile Glu Val Lys Trp Thr Lys Tyr Gly Ser Leu Leu Asn
            195                 200                 205

Pro Gln Ala Lys Ile Val Asn Val Thr Ala Asn Leu Ile Ser Ser Ser
    210                 215                 220

Phe Pro Glu Ala Asn Ser Gly Asn Glu Arg Thr Ile Leu Ile Ser Thr
225                 230                 235                 240

Ala Val Thr Phe Val Asp Val Ser Ala Pro Ala Glu Ala Gly Phe Arg
                245                 250                 255

Ala Pro Pro Ala Ile Asn Ala Arg Leu Pro Phe Asn Phe Phe Phe Pro
            260                 265                 270

Phe Val
```

```
<210> 345
<211> 254
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (5)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (15)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (17)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
```

<221> SITE
<222> (24)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 345
Thr His Leu Phe Xaa Cys Asn Ser Tyr Tyr Lys Pro Leu Thr Xaa His
  1   5   10   15

Xaa Pro Phe Ile Ile Gln Lys Xaa Pro Asp Glu Asn Asn Phe Asp Thr
            20   25   30

Leu Met Lys Thr Ser Asp Gly Phe Thr Leu Asn Ala Glu Ser Tyr Val
        35   40   45

Ser Phe Thr Thr Lys Leu Asp Ile Pro Thr Ala Ala Lys Tyr Glu Tyr
    50   55   60

Gly Val Pro Leu Gln Thr Ser Asp Ser Phe Leu Arg Phe Pro Ser Ser
65   70   75   80

Leu Thr Ser Ser Leu Cys Thr Asp Asn Asn Pro Ala Ala Phe Leu Val
            85   90   95

Asn Gln Ala Val Lys Cys Thr Arg Lys Ile Asn Leu Glu Gln Cys Glu
            100   105   110

Glu Ile Glu Ala Leu Ser Met Ala Phe Tyr Ser Ser Pro Glu Ile Leu
        115   120   125

Arg Val Pro Asp Ser Arg Lys Lys Val Pro Ile Thr Val Gln Ser Ile
    130   135   140

Val Ile Gln Ser Leu Asn Lys Thr Leu Thr Arg Arg Glu Asp Thr Asp
145   150   155   160

Val Leu Gln Pro Thr Leu Val Asn Ala Gly His Phe Ser Leu Cys Val
                165   170   175

Asn Val Val Leu Glu Asp Ser Cys Gln Leu Pro Gly Ala Leu Val Ile
            180   185   190

Glu Val Lys Trp Thr Lys Tyr Gly Ser Leu Leu Asn Pro Gln Ala Lys
        195   200   205

Ile Val Asn Val Thr Ala Asn Leu Ile Ser Ser Ser Phe Pro Glu Asn
    210   215   220

Ala Gln Met His Gln Phe Leu Asn Ile His Val Lys Phe Glu Asn Cys
225   230   235   240

Thr Phe Gly Glu Ile Lys Phe Tyr Ile Gln Leu Ala Lys Lys
                245   250

<210> 346
<211> 587
<212> PRT
<213> Homo sapiens

<400> 346

Met	Arg	Pro	Arg	Gly	Leu	Pro	Pro	Leu	Leu	Val	Val	Leu	Leu	Gly	Cys
1				5					10					15	

Met Arg Pro Arg Gly Leu Pro Pro Leu Leu Val Val Leu Leu Gly Cys
 1   5   10   15

Trp Ala Ser Val Ser Ala Gln Thr Asp Ala Thr Pro Ala Val Thr Thr
             20   25   30

Glu Gly Leu Asn Ser Thr Glu Ala Ala Leu Ala Thr Phe Gly Thr Phe
             35   40   45

Pro Ser Thr Arg Pro Pro Gly Thr Pro Arg Ala Pro Gly Pro Ser Ser
         50   55   60

Gly Pro Arg Pro Thr Pro Val Thr Asp Val Ala Val Leu Cys Val Cys
 65   70   75   80

Asp Leu Ser Pro Ala Gln Cys Asp Ile Asn Cys Cys Cys Asp Pro Asp
                 85   90   95

Cys Ser Ser Val Asp Phe Ser Val Phe Ser Ala Cys Ser Val Pro Val
             100   105   110

Val Thr Gly Asp Ser Gln Phe Cys Ser Gln Lys Ala Val Ile Tyr Ser
         115   120   125

Leu Asn Phe Thr Ala Asn Pro Pro Gln Arg Val Phe Glu Leu Val Asp
     130   135   140

Gln Ile Asn Pro Ser Ile Phe Cys Ile His Ile Thr Asn Tyr Lys Pro
145   150   155   160

Ala Leu Ser Phe Ile Asn Pro Glu Val Pro Asp Glu Asn Asn Phe Asp
                 165   170   175

Thr Leu Met Lys Thr Ser Asp Gly Phe Thr Leu Asn Ala Glu Ser Tyr
             180   185   190

Val Ser Phe Thr Thr Lys Leu Asp Ile Pro Thr Ala Ala Lys Tyr Glu
         195   200   205

Tyr Gly Val Pro Leu Gln Thr Ser Asp Ser Phe Leu Arg Phe Pro Ser
     210   215   220

Ser Leu Thr Ser Ser Leu Cys Thr Asp Asn Asn Pro Ala Ala Phe Leu
225   230   235   240

Val Asn Gln Ala Val Lys Cys Thr Arg Lys Ile Asn Leu Glu Gln Cys
                 245   250   255

Glu Glu Ile Glu Ala Leu Ser Met Ala Phe Tyr Ser Ser Pro Glu Ile
             260   265   270

Leu Arg Val Pro Asp Ser Arg Lys Lys Val Pro Ile Thr Val Gln Ser
         275   280   285

Ile Val Ile Gln Ser Leu Asn Lys Thr Leu Thr Arg Arg Glu Asp Thr
     290   295   300

Asp Val Leu Gln Pro Thr Leu Val Asn Ala Gly His Phe Ser Leu Cys
305   310   315   320

184

```
Val Asn Val Val Leu Glu Val Lys Tyr Ser Leu Thr Tyr Thr Asp Ala
              325             .         330             335

Gly Glu Val Thr Lys Ala Asp Leu Ser Phe Val Leu Gly Thr Val Ser
             340                  ·345                 350

Ser Val Val Val Pro Leu Gln Gln Lys Phe Glu Ile His Phe Leu Gln
            355                 360             365

Glu Asn Thr Gln Pro Val Pro Leu Ser Gly Asn Pro Gly Tyr Val Val
    370                 375 ·             380

Gly Leu Pro Leu Ala Ala Gly Phe Gln Pro His Lys Gly Ser Gly Ile
385                 390                 395             400

Ile Gln Thr Thr Asn Arg Tyr Gly Gln Leu Thr Ile Leu His Ser Thr
            405                 410             415

Thr Glu Gln Asp Cys Leu Ala Leu Glu Gly Val Arg Thr Pro Val Leu
            420                 425             430 ·

Phe Gly Tyr Thr Met Gln Ser Gly Cys Lys Leu Arg Leu Thr Gly Ala
        435              ·  440             445

Leu Pro Cys Gln Leu Val Ala Gln Lys Val Lys Ser Leu Leu Trp Gly
    450             455             460

Gln Gly Phe Pro Asp Tyr Val Ala Pro Phe Gly Asn Ser Gln Ala Gln
465             · 470             475             · 480

Asp Met Leu Asp Trp Val Pro Ile His Phe Ile Thr Gln Ser Phe Asn
            485             490             495

Arg Lys Asp Ser Cys Gln Leu Pro Gly Ala Leu Val Ile Glu Val Lys
            500             505             510

Trp Thr Lys Tyr Gly Ser Leu Leu Asn Pro Gln Ala Lys Ile Val Asn
        515 ·             520             525

Val Thr Ala Asn Leu Ile Ser Ser Ser Phe Pro Glu Ala Asn Ser Gly
    530                 535             540

Asn Glu Arg Thr Ile Leu Ile Ser Thr Ala Val Thr Phe Val Asp Val
545             550             555             560

Ser Ala Pro Ala Glu Ala Gly Phe Arg Ala Pro Pro Ala Ile Asn Ala
            565             · 570             575

Arg Leu Pro ·Phe Asn Phe Phe Phe Pro Phe Val
        580             585
```

```
Met Lys Ala Leu Gly Ala Val Leu Leu Ala Leu Leu Leu Cys Gly Arg
 1             5                10                15

Pro Gly Arg Gly Gln Thr Gln Gln Glu Glu Glu Glu Glu Asp Glu Asp
            20                25                30

His Gly Pro Asp Asp Tyr Asp Glu Glu Asp Glu Asp Glu Val Glu Glu
            35                40                45

Glu Glu Thr Asn Arg Leu Pro Gly Gly Arg Ser Arg Val Leu Leu Arg
      50                55                60

Cys Tyr Thr Cys Lys Ser Leu Pro Arg Asp Glu Arg Cys Asn Leu Thr
 65                70                75                80

Gln Asn Cys Ser His Gly Gln Thr Cys Thr Thr Leu Ile Ala His Gly
            85                90                95

Asn Thr Glu Ser Gly Leu Leu Thr Thr His Ser Thr Trp Cys Thr Asp
            100               105               110

Ser Cys Gln Pro Ile Thr Lys Thr Val Glu Gly Thr Gln Val Thr Met
      115               120               125

Thr Cys Cys Gln Ser Ser Leu Cys Asn Val Pro Pro Trp Gln Ser Ser
      130               135               140

Arg Val Gln Asp Pro Thr Gly Lys Gly Ala Gly Gly Pro Arg Gly Ser
145               150               155               160

Ser Glu Thr Val Gly Ala Ala Leu Leu Leu Asn Leu Leu Ala Gly Leu
            165               170               175

Gly Ala Met Gly Ala Arg Arg Pro
            180
```

```
<210> 348
<211> 108
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (19)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (21)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (29)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
```

<222> (87)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 348
Met Phe Ser Leu Ser Trp Gln Leu Ser Leu Val Thr Phe Met Gly Phe
1   5   10   15

Pro Ile Xaa Met Xaa Val Ser Asn Ile Tyr Gly Lys Xaa Tyr Lys Arg
        20   25   30

Leu Ser Lys Glu Val Gln Asn Ala Leu Ala Arg Ala Ser Asn Thr Ala
        35   40   45

Glu Glu Thr Ile Ser Ala Met Lys Thr Val Arg Ser Phe Ala Asn Glu
        50   55   60

Glu Glu Glu Ala Glu Val Tyr Leu Arg Lys Leu Gln Gln Val Tyr Lys
65   70   75   80

Leu Asn Arg Lys Glu Ala Xaa Ala Tyr Met Tyr Tyr Val Trp Gly Ser
                85   90   95

Gly Leu Thr Leu Leu Val Val Gln Val Ser Ile Leu
            100   105

<210> 349
<211> 219
<212> PRT
<213> Homo sapiens

<400> 349
Val Thr Ile Leu Cys Ile Asp Leu Gly Thr Asp Met Val Pro Ala Ile
1   5   10   15

Ser Leu Ala Tyr Glu Gln Ala Glu Ser Asp Ile Met Lys Arg Gln Pro
            20   25   30

Arg Asn Pro Lys Thr Asp Lys Leu Val Asn Glu Arg Leu Ile Ser Met
            35   40   45

Ala Tyr Gly Gln Ile Gly Met Ile Gln Ala Leu Gly Gly Phe Phe Thr
        50   55   60

Tyr Phe Val Ile Leu Ala Glu Asn Gly Phe Leu Pro Ile His Leu Leu
65   70   75   80

Gly Leu Arg Val Asp Trp Asp Asp Arg Trp Ile Asn Asp Val Glu Asp
                85   90   95

Ser Tyr Gly Gln Gln Trp Thr Tyr Glu Gln Arg Lys Ile Val Glu Phe
            100   105   110

Thr Cys His Thr Ala Phe Phe Val Ser Ile Val Val Val Gln Trp Ala
        115   120   125

Asp Leu Val Ile Cys Lys Thr Arg Arg Asn Ser Val Phe Gln Gln Gly
        130   135   140

187

Met Lys Asn Lys Ile Leu Ile Phe Gly Leu Phe Glu Glu Thr Ala Leu
145   150   155   160

Ala Ala Phe Leu Ser Tyr Cys Pro Gly Met Gly Val Ala Leu Arg Met
                165   170   175

Tyr Pro Leu Lys Pro Thr Trp Trp Phe Cys Ala Phe Pro Tyr Ser Leu
            180   185   190

Leu Ile Phe Val Tyr Asp Glu Val Arg Lys Leu Ile Ile Arg Arg Arg
        195   200   205

Pro Gly Gly Trp Val Glu Lys Glu Thr Tyr Tyr
    210   215

<210> 350
<211> 73
<212> PRT
<213> Homo sapiens

<400> 350
Phe Ser Ser Ser Met Ser Leu Ser Phe Leu Pro Phe Leu Pro Phe Leu
    1   5   10   15

Ser Pro Cys Ser Glu Thr Ala Ala Gly Ser Tyr Leu Ser Arg Pro Thr
            20   25   30

Pro Phe Pro Met Val Ala Val Leu Ser Ala Gly Ala Gly Ser Cys Arg
        35   40   45

Trp Arg Ile Arg Glu Lys Ser Thr Glu Gln Leu Pro Ala Glu Arg Ala
    50   55   60

Gly Pro Gly Glu Pro Ser Gly Gly Ser
65   70

<210> 351
<211> 296
<212> PRT
<213> Homo sapiens

<400> 351
Met Phe Ser Leu Ser Trp Gln Leu Ser Leu Val Thr Phe Met Gly Phe
    1   5   10   15

Pro Ile Ile Met Met Val Ser Asn Ile Tyr Gly Lys Tyr Tyr Lys Arg
            20   25   30

Leu Ser Lys Glu Val Gln Asn Ala Leu Ala Arg Ala Ser Asn Thr Ala
            35   40   45

Glu Glu Thr Ile Ser Ala Met Lys Thr Val Arg Ser Phe Ala Asn Glu
        50   55   60

Glu Glu Glu Ala Glu Val Tyr Leu Arg Lys Leu Gln Gln Val Tyr Lys
65   70   75   80

188

```
Leu Asn Arg Lys Glu Ala Ala Ala Tyr Met Tyr Tyr Val Trp Gly Ser
                85               90                   95

Gly Leu Thr Leu Leu Val Val Gln Val Ser Ile Leu Tyr Tyr Gly Gly
            100              105               110

His Leu Val Ile Ser Gly Gln Met Thr Ser Gly Asn Leu Ile Ala Phe
        115              120               125

Ile Ile Tyr Glu Phe Val Leu Gly Asp Cys Met Glu Asn Val Ser Phe
    130              135               140

Ser Leu Ser Pro Gly Lys Val Thr Ala Leu Val Gly Pro Ser Gly Ser
145              150               155               160

Gly Lys Ser Ser Cys Val Asn Ile Leu Glu Asn Phe Tyr Pro Leu Glu
            165              170               175

Gly Gly Arg Val Leu Leu Asp Gly Lys Pro Ile Ser Ala Tyr Asp His
        180              185               190

Lys Tyr Leu His Arg Val Ile Ser Leu Val Ser Gln Glu Pro Val Leu
    195              200              205

Phe Ala Arg Ser Ile Thr Asp Asn Ile Ser Tyr Gly Leu Pro Thr Val
    210              215               220

Pro Phe Glu Met Val Val Glu Ala Ala Gln Lys Ala Asn Ala His Gly
225              230               235               240

Phe Ile Met Glu Leu Gln Asp Gly Tyr Ser Thr Glu Thr Gly Glu Lys
            245              250               255

Gly Ala Gln Leu Ser Gly Gly Gln Lys Gln Arg Val Ala Trp Pro Gly
            260              265               270

Leu Trp Cys Gly Thr Pro Gln Ser Ser Ser Trp Met Lys Pro Pro Ala
        275              280               285

Leu Trp Met Pro Arg Ala Ser Ile
    290              295
```

```
<210> 352
<211> 446
<212> PRT
<213> Homo sapiens

<400> 352
Met Phe Ser Leu Ser Trp Gln Leu Ser Leu Val Thr Phe Met Gly Phe
  1           5               10               15

Pro Ile Ile Met Met Val Ser Asn Ile Tyr Gly Lys Tyr Tyr Lys Arg
            20              25               30

Leu Ser Lys Glu Val Gln Asn Ala Leu Ala Arg Ala Ser Asn Thr Ala
        35              40               45
```

189

```
Glu Glu Thr Ile Ser Ala Met Lys Thr Val Arg Ser Phe Ala Asn Glu
    50              55              60

Glu Glu Glu Ala Glu Val Tyr Leu Arg Lys Leu Gln Gln Val Tyr Lys
65              70              75              80

Leu Asn Arg Lys Glu Ala Ala Ala Tyr Met Tyr Tyr Val Trp Gly Ser
            85              90              95

Gly Leu Thr Leu Leu Val Val Gln Val Ser Ile Leu Tyr Tyr Gly Gly
            100             105             110

His Leu Val Ile Ser Gly Gln Met Thr Ser Gly Asn Leu Ile Ala Phe
        115             120             125

Ile Ile Tyr Glu Phe Val Leu Gly Asp Cys Met Glu Ser Val Gly Ser
    130             135             140

Val Tyr Ser Gly Leu Met Gln Gly Val Gly Ala Ala Glu Lys Val Phe
145             150             155             160

Glu Phe Ile Asp Arg Gln Pro Thr Met Val His Asp Gly Ser Leu Ala
            165             170             175

Pro Asp His Leu Glu Gly Arg Val Asp Phe Glu Asn Val Thr Phe Thr
        180             185             190

Tyr Arg Thr Arg Pro His Thr Gln Val Leu Gln Asn Val Ser Phe Ser
    195             200             205

Leu Ser Pro Gly Lys Val Thr Ala Leu Val Gly Pro Ser Gly Ser Gly
    210             215             220

Lys Ser Ser Cys Val Asn Ile Leu Glu Asn Phe Tyr Pro Leu Glu Gly
225             230             235             240

Gly Arg Val Leu Leu Asp Gly Lys Pro Ile Ser Ala Tyr Asp His Lys
            245             250             255

Tyr Leu His Arg Val Ile Ser Leu Val Ser Gln Glu Pro Val Leu Phe
        260             265             270

Ala Arg Ser Ile Thr Asp Asn Ile Ser Tyr Gly Leu Pro Thr Val Pro
    275             280             285

Phe Glu Met Val Val Glu Ala Ala Gln Lys Ala Asn Ala His Gly Phe
    290             295             300

Ile Met Glu Leu Gln Asp Gly Tyr Ser Thr Glu Thr Gly Glu Lys Gly
305             310             315             320

Ala Gln Leu Ser Gly Gly Gln Lys Gln Arg Val Ala Met Ala Arg Ala
            325             330             335

Leu Val Arg Asn Pro Pro Val Leu Ile Leu Asp Glu Ala Thr Ser Ala
        340             345             350

Leu Asp Ala Glu Ser Glu Tyr Leu Ile Gln Gln Ala Ile His Gly Asn
    355             360             365
```

190

Leu Gln Lys His Thr Val Leu Ile Ile Ala His Arg Leu Ser Thr Val
    370   375   380

Glu His Ala His Leu Ile Val Val Leu Asp Lys Gly Arg Val Val Gln
385   390   395   400

Gln Gly Thr His Gln Gln Leu Leu Ala Gln Gly Gly Leu Tyr Ala Lys
                405   410   415

Leu Val Gln Arg Gln Met Leu Gly Leu Gln Pro Ala Ala Asp Phe Thr
            420   425   430

Ala Gly His Asn Glu Pro Val Ala Asn Gly Ser His Lys Ala
        435   440   445

<210> 353
<211> 35
<212> PRT
<213> Homo sapiens

<400> 353
Lys Phe Lys Gln Val Ile Lys Ser Phe Tyr Lys Ile His Leu Ala Lys
    1   5   10   15

Glu Ile Leu Ser Met Asn Ile Lys Leu Arg Lys Val Leu Tyr Val Phe
            20   25   30

Leu Val Asn
        35

<210> 354
<211> 27
<212> PRT
<213> Homo sapiens

<400> 354
Met Ala Ile Phe Cys Phe Ser Leu Cys Ser Leu Gly Ser Ile Leu Gly
    1   5   10   15

Lys Gly Met Ser Thr Phe Gly Ser Ile Ser Val
            20   25

<210> 355
<211> 99
<212> PRT
<213> Homo sapiens

<400> 355
Met Gly Arg Val Ser Ile Gln Gln Leu Gly Val Leu Val Ala Leu Pro
    1   5   10   15

Val Pro Leu Leu Leu Leu Gly Cys Gly Ser Ala Leu His Pro Gly Ala
            20   25   30

Pro Arg Ser Ile Pro His Thr Met Pro Ser Thr Arg Glu Val Gly Gln
        35   40   45

Thr Arg Pro Gly Pro Cys Gln Pro Ser Val Pro Arg Phe Ser His Trp
        50   55   60

Leu His Arg Met Val Ala Phe Ser Leu Pro Thr Ser Gln Ser Cys Ser
65   70   75   80

Glu Gly Ala Trp Arg Ser Thr Leu Ser His Gln Gly Gln Leu Glu Thr
                85   90   95

Lys Ala Ile

<210> 356
<211> 99
<212> PRT
<213> Homo sapiens

<400> 356
Met Gly Arg Val Ser Ile Gln Gln Leu Gly Val Leu Val Ala Leu Pro
1   5   10   15

Val Pro Leu Leu Leu Leu Gly Cys Gly Ser Ala Leu His Pro Gly Ala
            20   25   30

Pro Arg Ser Ile Pro His Thr Met Pro Ser Thr Arg Glu Val Gly Gln
        35   40   45

Thr Arg Pro Gly Pro Cys Gln Pro Ser Val Pro Arg Phe Ser His Trp
        50   55   60

Leu His Arg Met Val Ala Phe Ser Leu Pro Thr Ser Gln Ser Cys Ser
65   70   75   80

Glu Gly Ala Trp Arg Ser Thr Leu Ser His Gln Gly Gln Leu Glu Thr
                85   90   95

Lys Ala Ile

<210> 357
<211> 99
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (75)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 357
Met Gly Arg Val Ser Ile Gln Gln Leu Gly Val Leu Val Ala Leu Pro
1   5   10   15

Val Pro Leu Leu Leu Leu Gly Cys Gly Ser Ala Leu His Pro Gly Ala
            20   25   . 30

Pro Arg Ser Ile Pro His Thr Met Pro Ser Thr Arg Glu Val Gly Gln
            35   40   45

Thr Arg Pro Gly Pro Cys Gln Pro Ser Val Pro Arg Phe Ser His Trp
     50   55   60

Leu His Arg Met Val Ala Phe Ser Leu Pro Xaa Ser Gln Ser Cys Ser
 65   70   75   80

Glu Gly Ala Trp Arg Ser Thr Leu Ser His Gln Gly Gln Leu Glu Thr
                85   90   95

Lys Ala Ile

<210> 358
<211> 67
<212> PRT
<213> Homo sapiens

<400> 358
Pro Ile Pro Trp Leu Cys Pro Pro Ser Pro Thr Leu Pro Leu Leu Ser
  1   5   10   15

Ile Phe Phe Leu Pro Thr His Pro Pro Pro Pro Ser Arg Arg Gly Gly
            20   25   30

Leu Gly Arg Pro Arg Pro Ser Leu Glu Lys Pro Ser Leu Ser Ser Ala
        35   40   45

Val Val Pro Pro Pro Asn Pro Ile Thr Ala Ala His Pro Ile Leu Thr
     50   55   60

Val Ile Leu
 65

<210> 359
<211> 4
<212> PRT
<213> Homo sapiens

<400> 359
Ala Pro Arg Gly
  1

<210> 360
<211> 71
<212> PRT
<213> Homo sapiens

<400> 360

193

```
Met Gln Asn Arg Ser Pro Ala Phe Cys Phe Leu Leu Met Tyr Leu Leu
 1               5                  10                  15

Cys Thr Cys Val Thr Arg Val Leu Leu Ser Ile Ile Phe Asn Leu Ile
            20                  25                  30

Arg Ala Tyr Leu Trp Ser Trp His Asp Val Thr Pro Cys Val Arg Val
        35                  40                  45

Gly Ile Thr Pro Val Tyr Leu Phe Leu Ser Ser Ala Ala His Asn Ala
    50                  55                  60

Arg His Ile Val Gly Thr Leu
65                  70
```

```
<210> 361
<211> 71
<212> PRT
<213> Homo sapiens

<400> 361
Met Gln Asn Arg Ser Pro Ala Phe Cys Phe Leu Leu Met Tyr Leu Leu
 1               5                  10                  15

Cys Thr Cys Val Thr Arg Val Leu Leu Ser Ile Ile Phe Asn Leu Ile
            20                  25                  30

Arg Ala Tyr Leu Trp Ser Trp His Asp Val Thr Pro Cys Val Arg Val
        35                  40                  45

Gly Ile Thr Pro Val Tyr Leu Phe Leu Ser Ser Ala Ala His Asn Ala
    50                  55                  60

Arg His Ile Val Gly Thr Leu
65                  70
```

```
<210> 362
<211> 51
<212> PRT
<213> Homo sapiens

<400> 362
Met Leu Gln Asp Leu Cys Leu Cys Leu Phe Ser Ser Phe Phe Leu Ser
 1               5                  10                  15

Leu Phe Val Cys Leu Lys Val Gly Gln Lys Ile Leu Leu Leu Thr Asp
            20                  25                  30

Phe Pro Trp Ser Ala Ala Val Lys Arg Ser Leu Ser Leu Leu Ser Phe
        35                  40                  45

Leu Met Glu
    50
```

```
<210> 363
<211> 51
<212> PRT
<213> Homo sapiens

<400> 363
Met Leu Gln Asp Leu Cys Leu Cys Leu Phe Ser Ser Phe Phe Leu Ser
1               5                   10                  15

Leu Phe Val Cys Leu Lys Val Gly Gln Lys Ile Leu Leu Leu Thr Asp
            20                  25                  30

Phe Pro Trp Ser Ala Ala Val Lys Arg Ser Leu Ser Leu Leu Ser Phe
        35                  40                  45

Leu Met Glu
    50


<210> 364
<211> 53
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (41)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 364
Ser Cys Phe Leu Ala Leu Lys Ser Ile Leu Ala Val Cys Gly Gly Ser
1               5                   10                  15

His Leu Pro Pro Ala Leu Trp Glu Ala Ser Gly Gly Gly Leu Val Pro
            20                  25                  30

Asn Ser Cys Ser Pro Gly Asp Pro Xaa Val Leu Glu Arg Pro Pro Pro
        35                  40                  45

Arg Trp Ser Ser Ser
    50


<210> 365
<211> 110
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (97)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 365
Met Asp Asn Arg Phe Ala Thr Ala Phe Val Ile Ala Cys Val Leu Ser
1               5                   10                  15

Leu Ile Ser Thr Ile Tyr Met Ala Ala Ser Ile Gly Thr Asp Phe Trp
```

```
                20                        25                        30

Tyr Glu Tyr Arg Ser Pro Val Gln Glu Asn Ser Ser Asp Leu Asn Lys
        35                    40                    45

Ser Ile Trp Asp Glu Phe Ile Ser Asp Glu Ala Asp Glu Lys Thr Tyr
    50                    55                    60

Asn Asp Ala Leu Phe Arg Tyr Asn Gly Thr Val Gly Leu Trp Arg Arg
65                    70                    75                    80

Cys Ile Thr Ile Pro Lys Asn Met His Trp Tyr Ser Pro Pro Glu Arg
                85                    90                    95

Xaa Glu Ser Phe Asp Val Val Thr Lys Cys Val Ser Ser His
            100                   105                   110
```

```
<210> 366
<211> 165
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (2)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (4)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (5)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (148)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 366
Arg Xaa Thr Xaa Xaa His Phe Ala Arg Thr Tyr Pro Gly Ile His Leu
 1           5                    10                    15

Arg Ile Gly Ser Asp Trp Lys Asn Ala Cys Ala Met Leu Lys Asp Gly
            20                    25                    30

Thr Ala Gly Ser His Phe Met Ala Ser Pro Gln Cys Val Gly Tyr Ser
        35                    40                    45

Arg Ser Thr Ala Ala Pro Leu Thr Met Thr Met Cys Leu Pro Asp Leu
    50                    55                    60

Lys Glu Ile Gln Arg Ala Val Lys Leu Trp Val Arg Ser Leu Asp Ala
65                    70                    75                    80
```

Gln Ser Val Tyr Val Ala Thr Asp Ser Glu Ser Tyr Val Pro Glu Leu
                    85   90   95

Gln Gln Leu Phe Lys Gly Lys Val Lys Val Val Ser Leu Lys Pro Glu
            100   105   110

Val Ala Gln Val Asp Leu Tyr Ile Leu Gly Gln Ala Asp His Phe Ile
        115   120   125

Gly Asn Cys Val Ser Ser Phe Thr Ala Phe Val Lys Arg Glu Arg Asp
    130   135   140

Leu Gln Gly Xaa Pro Ser Ser Phe Phe Gly Met Asp Arg Pro Pro Lys
145   150   155   160

Leu Arg Asp Glu Phe
                165

<210> 367
<211> 177
<212> PRT
<213> Homo sapiens

<400> 367
Leu Val Leu Trp Thr Arg Phe Tyr Arg Gly Asp Met Ser Leu His Ser
 1   5   10   15

Ser Pro Thr Leu Pro Thr Ser Leu Tyr Gln Ser Cys Asp Leu Ser Val
            20   25   30

Gly Gly Pro Ser Leu Leu Thr Trp Val Trp Arg Arg Glu Arg Arg Cys
        35   40   45

Cys Lys Val Phe Ser Val Ser His Cys Leu Glu Ala Gly Pro Ala Lys
    50   55   60

Ala Trp Ala His Ser Cys Thr Gly Ser Pro Arg Gly Arg Thr Gly Trp
65   70   75   80

Gly Ser Arg Ala Cys Glu Ala Leu Gly Lys Gly Met Gly Leu Trp Gly
                85   90   95

Arg Gly Gly Met Gly Phe Arg Ser Ile Cys Thr Ile Arg Lys Val Leu
            100   105   110

Arg Ser Phe Phe Leu Glu Gly Thr Leu Ser Ser Leu Ser Leu Phe Leu
            115   120   125

Asp Leu Gly Leu Glu Leu Arg Met Gly Arg Cys Ala Gln Gly Gly Thr
    130   135   140

His Gln Ser Thr Arg Glu Gly Gly Tyr Leu Gly Val Ser Gln Gly Leu
145   150   155   160

Cys Gln Cys Leu Gln Pro Thr Ser Arg Ser Leu Glu Phe Gly Glu Trp
                165   170   175

Gly

```
<210> 368
<211> 184
<212> PRT
<213> Homo sapiens

<400> 368
Met Asp Asn Arg Phe Ala Thr Ala Phe Val Ile Ala Cys Val Leu Ser
  1               5                  10                  15

Leu Ile Ser Thr Ile Tyr Met Ala Ala Ser Ile Gly Thr Asp Phe Trp
               20                  25                  30

Tyr Glu Tyr Arg Ser Pro Val Gln Glu Asn Ser Ser Asp Leu Asn Lys
         35                  40                  45

Ser Ile Trp Asp Glu Phe Ile Ser Asp Glu Ala Asp Glu Lys Thr Tyr
     50                  55                  60

Asn Asp Ala Leu Phe Arg Tyr Asn Gly Thr Val Gly Leu Trp Arg Arg
 65                  70                  75                  80

Cys Ile Thr Ile Pro Lys Asn Met His Trp Tyr Ser Pro Pro Glu Arg
                 85                  90                  95

Thr Glu Ser Phe Asp Val Val Thr Lys Cys Val Ser Phe Thr Leu Thr
             100                 105                 110

Glu Gln Phe Met Glu Lys Phe Val Asp Pro Gly Asn His Asn Ser Gly
         115                 120                 125

Ile Asp Leu Leu Arg Thr Tyr Leu Trp Arg Cys Gln Phe Leu Leu Pro
   130                 135                 140

Phe Val Ser Leu Gly Leu Met Cys Phe Gly Ala Leu Ile Gly Leu Cys
145                 150                 155                 160

Ala Cys Ile Cys Arg Ser Leu Tyr Pro Thr Ile Ala Thr Gly Ile Leu
                165                 170                 175

His Leu Leu Ala Asp Thr Met Leu
                180


<210> 369
<211> 211
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (64)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
```

198

<222> (113)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 369
Ser Thr His Ala Ser Gly Arg Thr Cys Ala Leu Pro Ala Ala Ala Thr
 1   5   10   15

Pro Arg Arg Val Gly Ala Ala Ala Pro Gly Cys Ala Gln Gly Arg Ala
                20   25   30

Thr Asp Gly Ala Arg Arg Ala Glu Leu Arg Arg Glu Pro Ala Val Val
            35   40   45

Ala His Arg His Gly His Ala Gly Ala His Gln Gly Gly Ala Gln Xaa
    50   55   60

Ala Ala Gln Pro His Arg Arg Leu Gln Val Pro Gln Ala Gln Ala Gly
65   70   75   80

Ala His Leu Ala Pro Gly Arg Glu Ser Glu Asp Pro Gln Glu Ser Glu
                85   90   95

His Gly Ala Gly Val His Gly Glu Pro Ala Ala Arg Ala Gly Gly Ala
            100   105   110

Xaa Gln Ala Glu Ser Pro Gln Pro Arg Gln Gln Arg Leu Pro Ala Ala
        115   120   125

Ala Pro Ala Pro Gly Ala Arg Val Leu Ser Pro Arg Ala Gly Arg Met
    130   135   140

Arg Gly His Pro Pro Gln Gly Ala Gly Ser Arg Gly Gly Val Val Gly
145   150   155   160

Ala Pro Asp Leu Glu Arg Val Arg Pro Trp Gly Pro Pro Leu Pro Glu
                165   170   175

Cys Ala Gln Glu Leu Arg Glu Gly Ala Ala Pro Gly Asp Ser Pro Pro
            180   185   190

Pro Arg Val Pro Arg Thr Arg Gln Ala Gly Pro Pro Ala Pro Gly Gly
        195   200   205

Ala Ser Ala
    210

<210> 370
<211> 225
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (11)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE

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<222> (112)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (166)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 370
Arg Pro Asp Leu Glu Arg Val Arg Pro Trp Xaa Pro Pro Leu Pro Glu
 1               5                  10              15

Cys Ala Gln Glu Leu Arg Glu Gly Ala Ala Pro Gly Ile Pro Pro Arg
            20                  25              30

Gly Cys Pro Gly Leu Gly Arg Gly Ala Pro Asp Ser Thr Ser Trp Thr
        35                  40                  45

Pro Cys Ser Arg Gly Gly Glu Arg Met Thr Pro Pro Pro Ser Arg Cys
    50                  55                  60

Leu Phe Pro Pro Arg Gly Arg Pro Val Leu His Lys Pro Ala Arg Leu
65                  70                  75                  80

Gly Cys Pro Phe Val His Arg Ala Gly Lys Gly Ala Pro Arg Gly Arg
                85                  90                  95

Ser Ser Lys Pro Cys Leu Ser Phe Thr Phe Thr Phe Phe Phe Phe Xaa
            100                 105             110

Phe Gly Arg Glu Lys Asn Arg Val Phe Asp Ser Ala Leu Phe Met Phe
        115                 120                 125

Leu Leu Gly Asn Lys Arg Trp Leu Cys Val Cys Val Phe Ser Cys Val
    130                 135             140

Gly Phe Leu Lys Lys Trp Glu Glu Glu Lys Lys Ile Leu Arg Pro Phe
145                 150                 155                 160

Pro Arg Ser Arg Ser Xaa Leu Arg Phe Phe Arg Pro Val Pro Pro Pro
                165             170                 175

Phe Phe Val Leu Phe Cys Phe Val Leu Leu Arg Val His Ile Pro Val
            180                 185                 190

Cys Asn Pro Trp Phe Ala Arg Phe Ser Val Phe Ser Lys Val Ser Leu
        195                 200                 205

Arg Gln Lys Pro Arg Ala Glu Phe Leu Gly Leu Glu Gly Gln Asn Phe
    210                 215                 220

Pro
225


<210> 371
<211> 68
<212> PRT
<213> Homo sapiens
```

200

<400> 371
```
Met Ile Pro Phe Phe Leu Val Trp Val Ser Phe Leu His Ser Phe Ser
1               5                   10                  15

Val Ala Cys Ile Leu Gly His His Glu Cys Phe Ala Phe Ser Leu Ala
            20                  25                  30

Asp Asp Thr Ile Gly Thr Ala Trp His Gly Gly Lys Val Ser His Lys
        35                  40                  45

Leu Thr Tyr Lys His Cys Gly Ser Arg Ala His Asp Tyr Leu Glu Gly
        50                  55                  60

Glu Ser Leu Leu
65
```

<210> 372
<211> 62
<212> PRT
<213> Homo sapiens

<400> 372
```
Val Ile Pro Phe Tyr Ile His Tyr Phe Val Tyr Phe Asn Cys Phe Ile
1               5                   10                  15

Leu Val Thr Leu Pro Phe Lys Ile Phe Lys Leu Pro Ile Val Arg Cys
            20                  25                  30

Gln Trp Glu Trp Thr Pro Asp Gly Gln Ile Tyr Lys Trp Gln Trp Leu
        35                  40                  45

Asp Gln Thr Arg Thr Leu Glu Asp Gly Arg Val Gly Ala Lys
        50                  55                  60
```

<210> 373
<211> 29
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (11)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (13)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 373
```
Ile Pro Leu Trp Phe Ile Ser Val Ser Phe Xaa Met Xaa Arg Phe Thr
1               5                   10                  15

Ile Leu Asn Gln Tyr His Val Thr Cys Arg Cys Gln Asn
            20                  25
```

201

<210> 374
<211> 68
<212> PRT
<213> Homo sapiens

<400> 374
Met Ile Pro Phe Phe Leu Val Trp Val Ser Phe Leu His Ser Phe Ser
  1   5   10   15

Val Ala Cys Ile Leu Gly His His Glu Cys Phe Ala Phe Ser Leu Ala
            20   25   30

Asp Asp Thr Ile Gly Thr Ala Trp His Gly Gly Lys Val Ser His Lys
            35   40   45

Leu Thr Tyr Lys His Cys Gly Ser Arg Ala His Asp Tyr Leu Glu Gly
        50   55   60

Glu Ser Leu Leu
 65

<210> 375
<211> 57
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (42)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (44)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 375
Leu Leu Ser Ala Met Leu Pro Gly Glu Asn Glu Ile Val Ala Trp Ile
  1   5   10   15

Asn Glu Ser Val Cys Val Ala Arg Ser Gly Leu Ala Leu Asp Val Asp
            20   25   30

Gly Ala Pro Ala Leu Ser Pro Gln Leu Xaa Ser Xaa Lys Ile Ser Asn
            35   40   45

Leu Glu Glu Asn Gly Arg Thr Val Glu
        50   55

<210> 376
<211> 43
<212> PRT
<213> Homo sapiens

202

<400> 376

```
Met Ala Leu Val Val Glu Ala Val Ile Ile Ile Phe Ile Glu Cys Gln
 1               5                   10                  15

Ala Leu Cys Ile Ile Leu Ser Ser Ser His Ile Asn Arg Arg Arg Gln
            20                  25                  30

Val Val Ile Ala Pro Phe Gly Glu Ser Glu Asn
        35                  40
```

<210> 377
<211> 24
<212> PRT
<213> Homo sapiens

<400> 377

```
Ser Ala Cys Phe Cys Cys Ala Ala Ser Ser Leu Phe Ser Ser Phe Ser
 1               5                   10                  15

Ile Val Ser Pro Leu Trp Lys Lys
            20
```

<210> 378
<211> 477
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (49)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (57)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (105)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (109)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (152)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (194)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (197)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (198)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (203)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (459)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (463)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (468)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 378
Met Val Asn Ala Cys Trp Cys Gly Leu Leu Ala Ala Leu Ser Leu Leu
 1   5   10   15

Leu Asp Ala Ser Thr Asp Glu Ala Ala Thr Glu Asn Ile Leu Lys Ala
             20   25   30

Glu Leu Thr Met Ala Ala Leu Cys Gly Lys Leu Gly Leu Val Thr Ser
         35   40   45

Xaa Asn Ala Phe Ile Thr Ala Ile Xaa Lys Gly Ser Leu Pro Pro His
     50   55   60

Tyr Ala Leu Thr Val Leu Asn Thr Thr Thr Ala Ala Thr Leu Ser Asn
65   70   75   80

Lys Ser Tyr Ser Val Gln Gly Gln Ser Val Met Met Ile Ser Pro Ser
             85   90   95

Ser Glu Ser His Gln Gln Val Val Xaa Val Gly Gln Xaa Leu Ala Val
             100   105   110

Gln Pro Gln Gly Thr Val Met Leu Thr Ser Lys Asn Ile Gln Cys Met
         115   120   125

Arg Thr Leu Leu Asn Leu Ala His Cys His Gly Ala Val Leu Gly Thr
         130   135   140

```
Ser Trp Gln Leu Val Leu Ala Xaa Leu Gln His Leu Val Trp Ile Leu
145             150             155             160

Gly Leu Lys Pro Ser Ser Gly Gly Ala Leu Lys Pro Gly Arg Ala Val
                165             170             175

Glu Gly Pro Ser Thr Val Leu Thr Thr Ala Val Met Thr Asp Leu Pro
            180             185             190

Val Xaa Ser Asn Xaa Xaa Ser Arg Leu Phe Xaa Ser Ser Gln Tyr Leu
        195             200             205

Asp Asp Val Ser Leu His His Leu Ile Asn Ala Leu Cys Ser Leu Ser
    210             215             220

Leu Glu Ala Met Asp Met Ala Tyr Gly Asn Asn Lys Glu Pro Ser Leu
225             230             235             240

Phe Ala Val Ala Lys Leu Leu Glu Thr Gly Leu Val Asn Met His Arg
            245             250             255

Ile Glu Ile Leu Trp Arg Pro Leu Thr Gly His Leu Leu Glu Val Cys
            260             265             270

Gln His Pro Asn Ser Arg Met Arg Glu Trp Gly Ala Glu Ala Leu Thr
    275             280             285

Ser Leu Ile Lys Ala Gly Leu Thr Phe Asn His Asp Pro Pro Leu Ser
    290             295             300

Gln Asn Gln Arg Leu Gln Leu Leu Leu Asn Pro Leu Lys Glu Met
    305             310             315             320

Ser Asn Ile Asn His Pro Asp Ile Arg Leu Lys Gln Leu Glu Cys Val
            325             330             335

Leu Gln Ile Leu Gln Ser Gln Gly Asp Ser Leu Gly Pro Gly Trp Pro
            340             345             350

Leu Val Leu Gly Val Met Gly Ala Ile Arg Asn Asp Gln Gly Glu Ser
            355             360             365

Leu Ile Arg Thr Ala Phe Gln Cys Leu Gln Leu Val Val Thr Asp Phe
    370             375             380

Leu Pro Thr Met Pro Cys Thr Cys Leu Gln Ile Val Val Asp Val Ala
385             390             395             400

Gly Ser Phe Gly Leu His Asn Gln Glu Leu Asn Ile Ser Leu Thr Ser
            405             410             415

Ile Gly Leu Leu Trp Asn Ile Ser Asp Tyr Phe Phe Gln Arg Gly Glu
        420             425             430

Thr Ile Glu Lys Glu Leu Asn Lys Glu Glu Ala Ala Gln Gln Lys Gln
    435             440             445

Ala Glu Glu Lys Gly Val Gly Leu Asn Arg Xaa Phe His Pro Xaa Pro
450             455             460
```

                                      205

Ala Phe Asp Xaa Trp Gly Tyr Ala Leu Cys Lys Ile Gly
465   470   475

<210> 379
<211> 29
<212> PRT
<213> Homo sapiens

<400> 379
Asn Ser Gln Tyr Phe Thr Thr Asn Ile Ala Leu Met Phe Leu Phe Lys
 1   5   10   15

Lys Lys Lys Val Tyr Gly Cys Leu His Leu Ser Thr Val
            20   25

<210> 380
<211> 70
<212> PRT
<213> Homo sapiens

<400> 380
Met His Leu Asn Val Gln Tyr Cys Thr Ile His Leu Ile Leu Leu Leu
 1   5   10   15

Leu Phe Ile Thr Arg His Tyr Ala Tyr Gln Trp Thr Phe Gln Val Gly
            20   25   30

Gly Leu Thr Val Ala Ser Ser Val Val Trp Gln His Pro Ser Ala Val
            35   40   45

Ser Ile Tyr Thr Leu Leu Tyr Ile Tyr Ala Pro His Gln Gly Ser Thr
    50   55   60

Gly Thr Arg Arg His Cys
.65   70

<210> 381
<211> 67
<212> PRT
<213> Homo sapiens

<400> 381
Leu Gln Glu Phe Gly Thr Ser Gly Thr Ser Ala Asn Thr Thr Ala Val
 1   5   10   15

Ala Leu Asn Ala Pro Ala His Pro Ala Arg Leu Leu Pro Pro Gly Pro
            20   25   30

Ala Val Ala Leu Leu Leu Leu Arg Gly Ser Cys Ser Leu Cys Cys Cys
            35   40   45

His Gln Pro His Lys Ala Ser Cys Lys Ala Met Pro Ser Ala Gly Ser
    50   55   60

Asn Val Pro
 65

<210> 382
<211> 79
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (23)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (45)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 382
Met Gly Cys Cys Ser Lys Lys Tyr Trp Gln Leu Leu Leu Gly Ala Ala
 1   5   10   15

Pro Trp Gly Val Ile Pro Xaa Leu Leu Leu Trp Met Gly Thr Arg Ala
            20   25   30

Pro His Phe Lys Asp Ser Val Ser Gln Gly Leu Pro Xaa Lys Ala Glu
        35   40   45

Glu Ser Arg Ala Asn Phe Asn Gln Phe Leu Val Leu Leu Met Pro Lys
     50   55   60

Glu Met Ile Val Leu Thr Ile Val His Pro Ile Val Arg Arg Ala
 65   70   75

<210> 383
<211> 39
<212> PRT
<213> Homo sapiens

<400> 383
Met Phe Leu Val Ser Pro Ser Val Ser Val Val Ser Ser Leu Leu
 1   5   10   15

Ser Ile Phe Trp Leu Met His Leu Gly Gln Val Trp Leu Gly Ser Met
            20   25   30

Glu Thr His Pro Ile Thr Ser
        35

<210> 384
<211> 39
<212> PRT
<213> Homo sapiens

207

<400> 384
Met Phe Leu Val Ser Pro Ser Val Ser Ser Val Val Ser Ser Leu Leu
 1   5   10   15

Ser Ile Phe Trp Leu Met His Leu Gly Gln Val Trp Leu Gly Ser Met
             20   25   30

Glu Thr His Pro Ile Thr Ser
         35

<210> 385
<211> 39
<212> PRT
<213> Homo sapiens

<400> 385
Met Phe Leu Val Ser Pro Ser Val Ser Ser Val Val Ser Ser Leu Leu
 1   5   10   15

Ser Ile Phe Trp Leu Met His Leu Gly Gln Val Trp Leu Gly Ser Met
             20   25   30

Glu Thr His Pro Ile Thr Ser
         35

<210> 386
<211> 198
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (9)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (12)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (97)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (164)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (196)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 386

```
Pro Asp Pro Asn Ala Arg Arg Gly Xaa Asn Ala Xaa Ser Thr Arg Thr
  1               5                  10                  15

Asp His Glu His Arg Thr Tyr Arg Leu Tyr Arg Arg Pro Ser Arg Phe
            20                  25                  30

Arg Asp Ser Pro Ala Gln Arg Pro Tyr Pro Ala Ala Gly Tyr Val Glu
        35              40                  45

Thr Val Ala Arg Ala His Glu Ala Ala Gly Phe Asp Arg Ala Leu Val
    50                  55                  60

Ala Phe His Ser Asn Ser Pro Asp Ser Thr Leu Ile Ala Ala His Ala
 65                  70                  75                  80

Ala Ser Val Thr Gln Lys Leu Gln Phe Leu Ile Ala His Arg Pro Gly
            85                  90                  95

Xaa Ala Gln Pro Thr Leu Ala Ala Arg Gln Phe Ala Thr Leu Asp Val
            100                 105                 110

Phe Asn Gly Gly Arg Thr Ala Val His Ile Ile Thr Gly Gly Asp Asp
        115                 120                 125

Arg Glu Leu Arg Ala Asp Gly Ser His Ile Gly Lys Asp Glu Arg Tyr
    130                 135                 140

Ala Arg Thr Asp Glu Tyr Leu Ser Val Val Arg Gln Glu Trp Thr His
 145             150                 155                 160

Glu Gln Pro Xaa Asp Phe Lys Gly Thr Tyr Tyr Gln Val Glu Gly Ala
            165                 170                 175

His Ser Thr Val Lys Ser Pro Gln Gln Pro His Ile Pro Leu Tyr Phe
            180                 185                 190

Gly Gly Ser Xaa Arg Gly
        195
```

<210> 387
<211> 34
<212> PRT
<213> Homo sapiens

<400> 387
```
Glu Leu Gly Arg Leu Arg His Pro Thr Gln Gly Lys Pro Ala Cys His
 1               5                  10                  15

Ile Glu Cys Thr Ala Leu Ile Lys Phe Thr His Asp Asn Ser Ala Phe
            20                  25                  30

Tyr Asn
```

<210> 388
<211> 207

209

```
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (105)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (110)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (111)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (116)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (129)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (133)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 388
Met Arg Pro Trp Arg Phe Gly Trp Pro Arg Thr Leu Ala Ser Gln Leu
  1           5             10            15

Ser Leu Ile Phe Leu Ile Ser Leu Val Cys Ala His Gly Leu Ser Phe
            20            25            30

Ser Ala Gln Phe Tyr Glu Arg Tyr Ile Ser Ala Arg Thr Val Met Leu
          35            40            45

Gly Asn Leu Glu Asn Asp Val Ser Thr Ser Val Ala Ile Leu Asp Arg
      50            55            60

Leu Pro Ala Asn Glu Arg Ala Ile Gly Trp Arg Val Leu Arg Pro Ala
 65            70            75            80

Glu Leu Pro Val Leu Leu Asn Ala Gly Glu Ala Gly Glu Pro Met Thr
            85            90            95

Ser Asn Asp Val Pro Met Ala Ala Xaa Phe Asp Cys Gly Xaa Xaa Gly
            100           105           110

Arg Ala Leu Xaa Pro Asp Leu Ser Arg Tyr Ser Arg His Pro Glu Thr
          115           120           125

Xaa Pro Gly Ala Xaa Asp Pro Gly Arg Trp Gln Pro Asp His Pro Arg
          130           135           140
```

210

Arg Thr Pro Arg Arg Pro Ala Arg Ser Leu Leu Val Ala Gly Gly Ala
145   150   155   160

Gly Ala Ala Thr Gly Ala Ala Ala Arg Leu His Leu Gly Arg Gly Ala
                165   170   175

Pro Gly Arg Ala Pro Ala Asp Thr Pro Gly Pro Cys Gly Arg Asn Pro
                180   185   190

Arg Pro Glu Arg Ser Pro His Thr Pro Gly Arg Asn Arg Pro Glu
        195   200   205

<210> 389
<211> 18
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (15)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (17)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 389
Gly Trp Pro Arg Trp Arg Arg Glu Arg Cys Ala Asn Thr Pro Xaa Val
 1   5   10   15

Xaa Leu

<210> 390
<211> 435
<212> PRT
<213> Homo sapiens

<400> 390
Met Arg Pro Trp Arg Phe Gly Trp Pro Arg Thr Leu Ala Ser Gln Leu
 1   5   10   15

Ser Leu Ile Phe Leu Ile Ser Leu Val Cys Ala His Gly Leu Ser Phe
                20   25   30

Ser Ala Gln Phe Tyr Glu Arg Tyr Ile Ser Ala Arg Thr Val Met Leu
        35   40   45

Gly Asn Leu Glu Asn Asp Val Ser Thr Ser Val Ala Ile Leu Asp Arg
    50   55   60

Leu Pro Ala Asn Glu Arg Ala Ser Trp Leu Ala Arg Leu Asp Arg Gln
 65   70   75   80

211

```
Asn Tyr Arg Tyr Leu Leu Asn Ala Gly Glu Ala Gly Glu Pro Met Thr
             85                  90                  95

Ser Asn Asp Val Pro Met Ala Ala Thr Ser Ile Ala Asp Ala Leu Gly
            100                 105                 110

Glu His Tyr Ala Leu Thr Phe Arg Asp Ile Pro Gly Ile Gln Lys His
            115                 120                 125

Phe Gln Val His Leu Thr Leu Ala Asp Gly Asn Pro Ile Thr Leu Asp
    130                 135                 140

Val Arg Pro Ala Ala Leu Pro Val Ala Tyr Trp Leu Pro Val Val Leu
145                 150                 155                 160

Val Leu Gln Leu Ala Leu Leu Leu Gly Cys Thr Trp Val Ala Val Arg
            165                 170                 175

Leu Ala Val Arg Pro Leu Thr Arg Leu Ala Arg Ala Val Glu Thr Leu
            180                 185                 190

Asp Pro Asn Ala His Pro Thr Pro Leu Asp Glu Thr Gly Pro Ser Glu
            195                 200                 205

Val Ala His Ala Ala Ala Ala Phe Asn Ala Met Gln Gln Arg Ile Ala
    210                 215                 220

Glu Tyr Leu Lys Glu Arg Met Gln Ile Leu Ala Ala Ile Ser His Asp
225                 230                 235                 240

Leu Gln Thr Pro Ile Thr Arg Met Lys Leu Arg Ala Glu Phe Met Asp
            245                 250                 255

Asp Ser Ala Asp Arg Glu Lys Leu Trp Ser Asp Leu Ser Glu Met Glu
            260                 265                 270

His Leu Val Arg Glu Gly Val Ala Tyr Ala Arg Ser Val His Gly Ala
    275                 280                 285

Thr Glu Ala Ser His Arg Ile Asp Leu Asp Ala Phe Leu Asp Ser Leu
    290                 295                 300

Val Phe Asp Tyr Gln Asp Met Gln Lys Gln Val Ser Leu Arg Gly Lys
305                 310                 315                 320

Ser Ala Leu Ile Leu Asp Thr Arg Pro His Ala Leu Arg Arg Val Leu
                325                 330                 335

Val Asn Leu Val Asp Asn Ala Leu Lys Phe Ala Gly Asn Ala Glu Leu
            340                 345                 350

Glu Val Gly Ser Thr Ala Asn Gly Gln Leu Ser Ile Lys Val Leu Asp
            355                 360                 365

Gln Gly Pro Gly Ile Ala Glu Asp Glu Leu Ala Gln Val Leu Gln Pro
    370                 375                 380

Phe Tyr Arg Val Glu Ser Ser Arg Asn Arg Gly Thr Gly Gly Thr Gly
385                 390                 395                 400
```

212

```
Leu Gly Leu Ala Ile Ala Gln Gln Leu Ala Val Ala Ile Gly Gly Thr
                405                 410                 415

Leu Thr Leu Ser Asn Arg Val Glu Gly Gly Leu Cys Ala Glu Ile Arg
                420                 425                 430

Leu Ser Leu
        435
```

```
<210> 391
<211> 34
<212> PRT
<213> Homo sapiens

<400> 391
Cys Lys Trp Val Gln Asn Gly Gly His Pro Asn Val Glu Ser Ser Lys
  1               5                  10                  15

Tyr His Cys His Glu Pro Lys Ala Ser Leu Tyr Thr Leu Glu Glu Ser
               20                  25                  30

Thr Leu
```

```
<210> 392
<211> 28
<212> PRT
<213> Homo sapiens

<400> 392
Leu Leu Leu Cys Lys Phe Lys Lys Val Asn Tyr Phe Leu Lys Val Leu
  1               5                  10                  15

Ile Ser Asn Phe Ser Ile Trp Ala Tyr Asp His His
               20                  25
```

```
<210> 393
<211> 36
<212> PRT
<213> Homo sapiens

<400> 393
Met Ala Gly His Pro Thr Leu Ile Leu Leu Cys Lys Trp Ala Phe His
  1               5                  10                  15

Leu Thr Gly Ala Ile Cys Glu Pro Tyr Leu Asn Gln Thr Leu Pro Thr
               20                  25                  30

Gln Ala Cys Leu
        35
```

```
<210> 394
```

```
<211> 36
<212> PRT
<213> Homo sapiens

<400> 394
Met Ala Gly His Pro Thr Leu Ile Leu Leu Cys Lys Trp Ala Phe His
 1               5                  10                  15

Leu Thr Gly Ala Ile Cys Glu Pro Tyr Leu Asn Gln Thr Leu Pro Thr
            20                  25                  30

Gln Ala Cys Leu
        35


<210> 395
<211> 41
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (15)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 395
Met Trp Leu Met Leu Ile Leu Ser Leu Thr Ser Gly Glu Thr Xaa Ala
 1               5                  10                  15

Leu Arg Gly Cys Cys Ser Ser Ser Trp Thr Tyr Gly Glu Ser Ala Ala
            20                  25                  30

Gly Pro Ala Asp Gln Ala Pro Cys Leu
        35                  40


<210> 396
<211> 41
<212> PRT
<213> Homo sapiens

<400> 396
Met Trp Leu Met Leu Ile Leu Ser Leu Thr Ser Gly Glu Thr Glu Ala
 1               5                  10                  15

Leu Arg Gly Cys Cys Ser Ser Ser Trp Thr Tyr Gly Glu Ser Ala Ala
            20                  25                  30

Gly Pro Ala Asp Gln Ala Pro Cys Leu
        35                  40


<210> 397
<211> 20
<212> PRT
<213> Homo sapiens
```

214

<400> 397
Ile Phe Ala Leu Ser Leu Ser Phe Tyr Thr Cys Ile His Ile His Thr
 1   5   10   15

His Arg His Thr
             20

<210> 398
<211> 117
<212> PRT
<213> Homo sapiens

<400> 398
Met Cys Thr Leu Phe Val Leu Ala Val Leu Leu Pro Val Leu Phe Leu
 1   5   10   15

Leu Tyr Arg His Arg Asn Ser Met Lys Val Phe Leu Lys Gln Gly Glu
             20   25   30

Cys Ala Ser Val His Pro Lys Thr Cys Pro Val Val Leu Pro Pro Glu
         35   40   45

Thr Arg Pro Leu Asn Gly Leu Gly Pro Pro Ser Thr Pro Leu Asp His
     50   55   60

Arg Gly Tyr Gln Ser Leu Ser Asp Ser Pro Pro Gly Ala Arg Val Phe
 65   70   75   80

Thr Glu Ser Glu Lys Arg Pro Leu Ser Ile Gln Asp Ser Phe Val Glu
                 85   90   95

Val Ser Pro Val Cys Pro Arg Pro Arg Val Arg Leu Gly Ser Glu Ile
             100   105   110

Arg Asp Ser Val Val
             115

<210> 399
<211> 183
<212> PRT
<213> Homo sapiens

<400> 399
Met Met Asn Val Ser Lys Ile Ser Phe Phe Ala Met Phe Leu Met Tyr
 1   5   10   15

Leu Leu Ala Ala Leu Phe Gly Tyr Leu Thr Phe Tyr Glu His Val Glu
             20   25   30

Ser Glu Leu Leu His Thr Tyr Ser Ser Ile Leu Gly Thr Asp Ile Leu
         35   40   45

Leu Leu Ile Val Arg Leu Ala Val Leu Met Ala Val Thr Leu Thr Val
     50   55   60

Pro Val Val Ile Phe Pro Ile Arg Ser Ser Val Thr His Leu Leu Cys

                                 215

```
        65                      70                      75                      80

Ala Ser Lys Asp Phe Ser Trp Trp Arg His Ser Leu Ile Thr Val Ser
                85                      90                      95

Ile Leu Ala Phe Thr Asn Leu Leu Val Ile Phe Val Pro Thr Ile Arg
            100                     105                     110

Asp Ile Phe Gly Phe Ile Gly Ala Ser Ala Ala Ser Met Leu Ile Phe
        115                     120                     125

Ile Leu Pro Ser Ala Phe Tyr Ile Lys Leu Val Lys Lys Glu Pro Met
        130                     135                     140

Lys Ser Val Gln Lys Ile Gly Ala Leu Phe Phe Leu Leu Ser Gly Val
145                     150                     155                     160

Leu Val Met Thr Gly Ser Met Ala Leu Ile Val Leu Asp Trp Val His
                165                     170                     175

Asn Ala Pro Gly Gly Gly His
                180
```

```
<210> 400
<211> 38
<212> PRT
<213> Homo sapiens

<400> 400
Met Val Ser Lys His Ser Leu Asn Leu His Phe Phe Tyr Trp Lys Gly
  1               5                      10                      15

Gly Cys Ala Cys Phe Thr Ser Glu Pro Arg Val Phe Val Val Val Glu
                20                      25                      30

Leu Ser Leu Leu Asp Cys
            35
```

```
<210> 401
<211> 38
<212> PRT
<213> Homo sapiens

<400> 401
Met Val Ser Lys His Ser Leu Asn Leu His Phe Phe Tyr Trp Lys Gly
  1               5                      10                      15

Gly Cys Ala Cys Phe Thr Ser Glu Pro Arg Val Phe Val Val Val Glu
                20                      25                      30

Leu Ser Leu Leu Asp Cys
            35
```

```
<210> 402
```

<211> 92
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (10)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (49)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 402
Ile Gly Pro Leu Leu Val Tyr Val Ser Xaa Thr His Glu Ser Leu Lys
 1   5   10   15

Leu Trp Gln Leu Lys Glu Thr Leu Ile Gln Ser Phe Pro Ala Leu Val
            20   25   30

Arg Ser Leu Gly Pro Gly Leu Leu Phe Gly Pro Pro Ile Ala Thr Gly
        35   40   45

Xaa Thr Gln Ala Gly Asp Met Ala Asp Lys Ser Gln Ala Gly Pro Arg
    50   55   60

Gly Ser Val Ser Ser Val Ala Trp Gly Pro Phe Pro Gly Gly Ser Gly
 65   70   75   80

Ala Leu Ala Phe Cys Pro Leu Ile Leu Arg Ser His
                85   90

<210> 403
<211> 24
<212> PRT
<213> Homo sapiens

<400> 403
Met His Ile Phe Thr Ile Leu Tyr Pro Ile Ser Glu Gly Phe Phe Lys
 1   5   10   15

Ile Phe Asn Phe Ile Val Phe Phe
                20

<210> 404
<211> 69
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (1)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 404

```
Xaa Ser Gly Asp Leu Pro Thr Ser Ala Phe Pro Lys Cys Trp Asp Tyr
 1           5                   10                  15

Arg Pro Glu Pro Pro Cys Pro Ala Gln Ala Gln Thr Ser Val Leu Cys
            20                  25                  30

Val Thr Ser Trp Ser Arg Leu Thr Val Ser Thr Leu Thr Ser Thr Ser
        35                  40                  45

Gln Ala Glu Gly Val Arg Ala Leu Pro Ile Trp Pro Ser Ser Gln Val
        50                  55                  60

Cys Ser Ile Gln Pro
 65
```

```
<210> 405
<211> 110
<212> PRT
<213> Homo sapiens

<400> 405
Ser Gln Gln Thr Leu Leu Ile Arg Pro Cys Cys Asn Lys Gln Thr Pro
 1           5                   10                  15

Ile Thr Asn His Pro His Cys Thr Gly Gly Gly His Gly Lys His Lys
            20                  25                  30

Gln Thr Leu Pro Thr Pro Ser Cys Asn Lys Arg His Lys Val Ile Cys
        35                  40                  45

Ser Lys Ile Asn Gln Gln Thr Thr Pro Gly Cys Gly His Thr Lys Glu
    50                  55                  60

Leu His Gln Thr Pro Leu Pro Asn Ile Asn Pro Ser Phe Cys Lys Leu
 65              70                  75                  80

Gly Ala Thr Ser Ser Leu Thr Val Lys Gly Ala Ala Ser Arg Leu Ile
            85                  90                  95

Lys Ser Tyr Leu Pro Lys Lys Lys Lys Lys Asn Ser Arg
            100                 105                 110
```

```
<210> 406
<211> 79
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (67)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 406
Met Val Phe Phe Gln Ile Gln Ser Leu Leu Ser Phe Leu Ala Ser Ser
 1           5                   10                  15
```

```
Leu Ser Ile Ile Phe Leu Leu Pro Arg Cys Leu Ile Pro Pro Ala Asn
          20                  25                  30

Gly Thr Ala Gly Ser Ser Cys Ser Glu Phe Gln Thr Leu His Thr Phe
          35                  40                  45

His Pro Gln Ala Ser Cys Ala His Ala Gly Pro Ser Asn Leu Tyr Thr
      50                  55                  60

Phe Leu Xaa Leu Phe Asp Leu Ser Ala Lys Val Ser Pro Leu Met
65                  70                  75
```

<210> 407
<211> 79
<212> PRT
<213> Homo sapiens

<400> 407
```
Met Val Phe Phe Gln Ile Gln Ser Leu Leu Ser Phe Leu Ala Ser Ser
1               5                   10                  15

Leu Ser Ile Ile Phe Leu Leu Pro Arg Cys Leu Ile Pro Pro Ala Asn
          20                  25                  30

Gly Thr Ala Gly Ser Ser Cys Ser Glu Phe Gln Thr Leu His Thr Phe
          35                  40                  45

His Pro Gln Ala Ser Cys Ala His Ala Gly Pro Ser Asn Leu Tyr Thr
      50                  55                  60

Phe Leu Arg Leu Phe Asp Leu Ser Ala Lys Val Ser Pro Leu Met
65                  70                  75
```

<210> 408
<211> 325
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (10)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (136)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (186)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (234)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 408

```
Val Pro Pro Ala Val Cys Pro Ala Gly Xaa Phe Cys Gln Asn Gln Cys
 1               5                  10                  15

Phe Thr Lys Arg Gln Tyr Pro Glu Thr Lys Ile Ile Lys Thr Asp Gly
            20                  25                  30

Lys Gly Trp Gly Leu Val Ala Lys Arg Asp Ile Arg Lys Gly Glu Phe
        35                  40                  45

Val Asn Glu Tyr Val Gly Glu Leu Ile Asp Glu Glu Glu Cys Met Ala
    50                  55                  60

Arg Ile Lys His Ala His Glu Asn Asp Ile Thr His Phe Tyr Met Leu
65                  70                  75                  80

Thr Ile Asp Lys Asp Arg Ile Ile Asp Ala Gly Pro Lys Gly Asn Tyr
            85                  90                  95

Ser Arg Phe Met Asn His Ser Cys Gln Pro Asn Cys Glu Thr Leu Lys
            100                 105                 110

Trp Thr Val Asn Gly Asp Thr Arg Val Gly Leu Phe Ala Val Cys Asp
        115                 120                 125

Ile Pro Ala Gly Thr Glu Leu Xaa Phe Asn Tyr Asn Leu Asp Cys Leu
    130                 135                 140

Gly Asn Glu Lys Thr Val Cys Arg Cys Gly Ala Ser Asn Cys Ser Gly
145                 150                 155                 160

Phe Leu Gly Asp Arg Pro Lys Thr Ser Thr Thr Leu Ser Ser Glu Glu
            165                 170                 175

Lys Gly Lys Lys Thr Lys Lys Thr Xaa Arg Arg Arg Ala Lys Gly
            180                 185                 190

Glu Gly Lys Arg Gln Ser Glu Asp Glu Cys Phe Arg Cys Gly Asp Gly
        195                 200                 205

Gly Gln Leu Val Leu Cys Asp Arg Lys Phe Cys Thr Lys Ala Tyr His
    210                 215                 220

Leu Ser Cys Leu Gly Leu Gly Lys Arg Xaa Phe Gly Lys Trp Glu Cys
225                 230                 235                 240

Pro Trp His His Cys Asp Val Cys Gly Lys Pro Ser Thr Ser Phe Cys
            245                 250                 255

His Leu Cys Pro Asn Ser Phe Cys Lys Glu His Gln Asp Gly Thr Ala
            260                 265                 270

Phe Ser Cys Thr Pro Asp Gly Arg Ser Tyr Cys Cys Glu His Asp Leu
            275                 280                 285

Gly Ala Ala Ser Val Arg Ser Thr Lys Thr Glu Lys Pro Pro Pro Glu
    290                 295                 300
```

```
Pro Gly Lys Pro Lys Gly Lys Arg Arg Arg Arg Arg Gly Trp Arg Arg
305                 310             315             320

Val Thr Glu Gly Lys
                325
```

<210> 409
<211> 161
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (123)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (129)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (145)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (146)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (157)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 409
```
Met Thr Thr Trp Ser Cys Leu Val Ala Met Ile Val Ser Gly Val Ile
  1               5               10              15

Thr Ala Val Trp Ala Val Arg Ala Ala Pro Ile Trp Arg Ser Gln Val
            20              25              30

Lys Gln Lys Met Arg Ile Gly Lys Gln Gly Asn Cys Arg Pro Pro Arg
        35              40              45

Cys Ile Cys Ser Ala Leu Gly Leu Leu Ala Pro Trp Met Ala Val Val
    50              55              60

Leu Ser Gln Leu Ser Val Arg Cys Val Val Ser Trp Val Gln Gly Lys
65              70              75              80

Pro Ser Ser Pro Arg Pro Arg Gly Ser Ala Ala Ser Pro Ala Pro Gly
            85              90              95

Ala Thr Pro Pro Thr Pro Arg Lys Pro Val Ser Trp Leu Gly Tyr Arg
            100             105             110
```

```
Glu Asn His Arg Pro Lys Lys Pro Lys Ser Xaa Thr Arg Cys Leu Val
        115             120             125

Xaa Gln Asn Trp Ser Leu Pro Pro Ile Ser Lys Asp Arg Thr Ala Gly
    130             135             140

Xaa Xaa Asp Thr Asn Arg Thr Arg Arg Ser Gly Leu Xaa Leu Arg Leu
145             150             155             160

Gly
```

```
<210> 410
<211> 57
<212> PRT
<213> Homo sapiens

<400> 410
Arg Pro Val Ser Thr Lys Lys Lys Lys Val Ser Trp Ala Trp Trp Cys
1               5               10              15

Thr Ser Ile Ala Pro Ala Thr Leu Glu Ala Lys Val Arg Gly Leu Leu
            20              25              30

Glu Pro Gly Arg Ser Val Ser Ala Val Ser Cys Asp Pro Ala Asn Ala
        35              40              45

Leu Ser Leu Gly Ser Val Arg Pro Cys
    50              55
```

```
<210> 411
<211> 58
<212> PRT
<213> Homo sapiens

<400> 411
Val Leu Cys Leu Gln Ile Tyr Cys Gln Thr Arg Phe Ser Ser Ser Leu
1               5               10              15

Ser Thr Ser Phe Thr Val Leu Asn Cys Met Tyr Arg Ser Val Ile Leu
            20              25              30

Ser Glu Leu Thr Phe Val Lys Asp Lys Arg Ser Val Leu Asp Arg Tyr
        35              40              45

Phe Pro Phe Ala Cys Gly Cys Pro Ala Pro
    50              55
```

```
<210> 412
<211> 141
<212> PRT
<213> Homo sapiens

<400> 412
```

```
Met Lys Ser Thr Leu Ser Ile Phe Ser Leu Trp Val Met Ile Phe Val
1                 5                   10                  15

Leu Cys Leu Gln Ile Tyr Cys Gln Thr Arg Phe Ser Ser Ser Leu Ser
                20                  25                  30

Thr Ser Phe Thr Val Leu Asn Cys Met Tyr Arg Ser Val Ile Leu Ser
            35                  40                  45

Glu Leu Thr Phe Val Lys Asp Lys Arg Ser Val Leu Asp Arg Leu Phe
        50                  55                  60

Phe Leu Leu His Val Val Val Gln His His Glu Asp Ser Ser Phe Ser
65              70                  75                      80

Thr Glu Leu Ser Leu Tyr Phe Cys Gln Arg Ser Asp Leu Pro Leu Lys
                85                  90                  95

Ser Leu Ser Asn Leu Ser Thr Ser His His Leu His Phe Gln Ser Leu
            100                 105                 110

Arg Thr Arg Gly Arg Thr Arg Gly Ser Thr Arg Glu Phe Arg Thr Gly
        115                 120                 125

Thr Cys Arg Arg Thr Ser Phe Pro Tyr Ser Glu Ser Tyr
    130                 135                 140
```

```
<210> 413
<211> 141
<212> PRT
<213> Homo sapiens
```

```
<400> 413
Met Lys Ser Thr Leu Ser Ile Phe Ser Leu Trp Val Met Ile Phe Val
1                 5                   10                  15

Leu Cys Leu Gln Ile Tyr Cys Gln Thr Arg Phe Ser Ser Ser Leu Ser
                20                  25                  30

Thr Ser Phe Thr Val Leu Asn Cys Met Tyr Arg Ser Val Ile Leu Ser
            35                  40                  45

Glu Leu Thr Phe Val Lys Asp Lys Arg Ser Val Leu Asp Arg Leu Phe
        50                  55                  60

Phe Leu Leu His Val Val Val Gln His His Glu Asp Ser Ser Phe Ser
65              70                  75                      80

Thr Glu Leu Ser Leu Tyr Phe Cys Gln Arg Ser Asp Leu Pro Leu Lys
                85                  90                  95

Ser Leu Ser Asn Leu Ser Thr Ser His His Leu His Phe Gln Ser Leu
            100                 105                 110

Gln Ala Thr Ile Leu Ser Cys Leu Ile Ile Ala Val Val Leu Thr Gly
        115                 120                 125

Leu Ala Leu Ser Val Asp Pro Cys Phe Ile His Arg Ile
```

223

130   135   140

<210> 414
<211> 57
<212> PRT
<213> Homo sapiens

<400> 414
Met Leu Glu Thr Leu Ser Gln Phe Ile Ser Ile Leu Phe Val Leu Leu
 1   5   10   15

Trp Ile Ile Ser Asp Leu Ile Leu Cys Phe Leu Lys Cys Gly Asn Pro
            20   25   30

Gly Thr Leu Asp Met Val Leu Pro Ile Trp Thr Asn Gln Tyr Ile His
        35   40   45

Ser Ser Arg Ser Ile Leu Ser Phe Ile
    50   55

<210> 415
<211> 57
<212> PRT
<213> Homo sapiens

<400> 415
Met Leu Glu Thr Leu Ser Gln Phe Ile Ser Ile Leu Phe Val Leu Leu
 1   5   10   15

Trp Ile Ile Ser Asp Leu Ile Leu Cys Phe Leu Lys Cys Gly Asn Pro
            20   25   30

Gly Thr Leu Asp Met Val Leu Pro Ile Trp Thr Asn Gln Tyr Thr His
        35   40   45

Ser Ser Arg Ser Ile Leu Ser Phe Ile
    50   55

<210> 416
<211> 85
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (14)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (59)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>

224

```
<221> SITE
<222> (68)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 416
Leu Leu Phe Leu Leu Gly Met Ala Trp Phe Asn Asp Trp Xaa Ala Ala
 1               5                  10                  15

Leu Tyr Met Pro Ala Phe Cys Ala Ile Leu Val Ala Leu Phe Ala Phe
            20                  25                  30

Ala Met Met Arg Asp Thr Pro Gln Ser Cys Gly Leu Pro Pro Ile Glu
        35                  40                  45

Glu Tyr Lys Asn Asp Tyr Pro Asp Asp Tyr Xaa Glu Lys Ala Glu Gln
    50                  55                  60

Glu Leu Thr Xaa Lys Gln Pro Gly Gly Arg Arg Leu Trp Leu His Pro
65                  70                  75                  80

Ala Tyr Thr Ala Ala
                85




<210> 417
<211> 66
<212> PRT
<213> Homo sapiens

<400> 417
Met Leu Phe Met Gly Phe Val Pro Trp Ala Thr Ser Ser Ile Ala Val
 1               5                  10                  15

Met Phe Val Leu Leu Phe Leu Cys Gly Trp Phe Gln Gly Met Gly Trp
            20                  25                  30

Pro Pro Cys Gly Arg Thr Met Val His Trp Trp Ser Gln Lys Glu Arg
        35                  40                  45

Gly Gly Ile Val Ser Val Trp Asn Cys Ala His Asn Val Gly Gly Trp
    50                  55                  60

Val Phe
 65




<210> 418
<211> 152
<212> PRT
<213> Homo sapiens

<400> 418
Met Leu Phe Met Gly Phe Val Pro Trp Ala Thr Ser Ser Ile Ala Val
 1               5                  10                  15

Met Phe Val Leu Leu Phe Leu Cys Gly Trp Phe Gln Gly Met Gly Trp
            20                  25                  30
```

Pro Pro Cys Gly Arg Thr Met Val His Trp Trp Ser Gln Lys Glu Arg
        35   40   45

Gly Gly Ile Val Ser Val Trp Asn Cys Ala His Asn Val Gly Gly Gly
        50   55   60

Ile Pro Pro Leu Leu Phe Leu Leu Gly Met Ala Trp Phe Asn Asp Trp
65   70   75   80

His Ala Ala Leu Tyr Met Pro Ala Phe Cys Ala Ile Leu Val Ala Leu
                85   90   95

Phe Ala Phe Ala Met Met Arg Asp Thr Pro Gln Ser Cys Gly Leu Pro
            100   105   110

Pro Ile Glu Glu Tyr Lys Asn Asp Tyr Pro Asp Asp Tyr Asn Glu Lys
        115   120   125

Ala Glu Gln Glu Leu Thr Ala Lys Gln Pro Gly Gly Arg Arg Leu Trp
    130   135   140

Leu His Pro Ala Tyr Thr Ala Ala
145   150

<210> 419
<211> 85
<212> PRT
<213> Homo sapiens

<400> 419
Met Val Met Gly Leu Lys Ala Leu Pro Glu Pro Phe Met Ser Leu Val
  1   5   10   15

Ser His Leu Leu Arg Thr Phe Phe Leu Val Trp Phe Val Gly Leu Pro
            20   25   30

Val Ala Ile Leu Gly Asn Leu Leu Glu Cys Tyr Ala Asn Val Phe Thr
            35   40   45

Gly Asn Gly Gly Gly Pro Glu Pro Trp Gly Gly His Leu Val Ser Glu
        50   55   60

Cys Leu Ala Leu Pro Gln Leu Gly Ile Gln Tyr Leu Ala Leu Ser Gly
65   70   75   80

Gly Ile Ile Trp Leu
                85

<210> 420
<211> 85
<212> PRT
<213> Homo sapiens

<400> 420
Met Val Met Gly Leu Lys Ala Leu Pro Glu Pro Phe Met Ser Leu Val
  1   5   10   15

```
Ser His Leu Leu Arg Thr Phe Phe Leu Val Trp Phe Val Gly Leu Pro
        20                    25                  30

Val Ala Ile Leu Gly Asn Leu Leu Glu Cys Tyr Ala Asn Val Phe Thr
        35                    40                  45

Gly Asn Gly Gly Gly Pro Glu Pro Trp Gly Gly His Leu Val Ser Glu
    50                    55                  60

Cys Leu Ala Leu Pro Gln Leu Gly Ile Gln Tyr Leu Ala Leu Ser Gly
 65                    70                  75                  80

Gly Ile Ile Trp Leu
                85
```


```
<210> 421
<211> 64
<212> PRT
<213> Homo sapiens

<400> 421
Met Trp Glu Thr Tyr Ile Trp Leu Val Leu Thr Phe Ala Gln Lys Ala
 1               5                10                  15

Cys Cys Met Lys Leu Thr Ala Thr Met Leu Lys Gln Ile His Ile Lys
        20                    25                  30

Lys Cys Arg Ser Ile Gln Trp Leu Leu Arg Val Asn Ser Phe Met Glu
        35                    40                  45

Ser Ser Met Ser Leu Ser Ser Lys Ile Arg Pro His Gln Arg Arg Asn
    50                    55                  60
```


```
<210> 422
<211> 64
<212> PRT
<213> Homo sapiens

<400> 422
Met Trp Glu Thr Tyr Ile Trp Leu Val Leu Thr Phe Ala Gln Lys Ala
 1               5                10                  15

Cys Cys Met Lys Leu Thr Ala Thr Met Leu Lys Gln Ile His Ile Lys
        20                    25                  30

Lys Cys Arg Ser Ile Gln Trp Leu Leu Arg Val Asn Ser Phe Met Glu
        35                    40                  45

Ser Ser Met Ser Leu Ser Ser Lys Ile Arg Pro His Gln Arg Arg Asn
    50                    55                  60
```

227

<210> 423
<211> 47
<212> PRT
<213> Homo sapiens

<400> 423
Ser Gln Leu Leu Arg Lys Leu Arg Trp Glu Asp Gly Leu Ser Leu Gly
  1   5   10   15

Gly Arg Val Cys Ser Glu Pro Arg Leu His His Cys Thr Pro Ala Trp
            20   25   30

Val Ile Gly Pro Gly Leu Val Leu Thr Thr Thr Thr Glu Lys Lys
          35   40   45

<210> 424
<211> 54
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (4)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (23)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 424
Ile Glu Thr Xaa Arg Phe Gly Gly Lys Gln Met Glu Leu Gln Glu Ile
  1   5   10   15

Lys Ser Ile Ile Ser Ser Xaa Met Trp Trp Leu Met Pro Leu Ile Leu
            20   25   30

Val Thr Gln Glu Ala Glu Ala Gly Gly Ser Leu Glu Ala Arg Ser Leu
          35   40   45

Arg Pro Pro Trp Ala Thr
    50

<210> 425
<211> 199
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (195)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 425

```
Lys Ala Gly Thr Pro Ala Gly Thr Gly Pro Glu Phe Pro Gly Arg Pro
 1               5                  10                  15

Thr Arg Pro Ile Tyr Ile Arg Arg Tyr Val Phe Lys Leu Gly Val Leu
                20          ·       25                  30

Gly Trp Gly Ala Pro Ala Leu Leu Val Leu Leu Ser Leu Ser Val Lys
        35                  40                  45

Ser Ser Val Tyr Gly Pro Cys Thr Ile Pro Val Phe Asp Ser Trp Glu
    50              55                  60

Asn Gly Thr Gly Phe Gln Asn Met Ser Ile Cys Trp Val Arg Ser Pro
 65                  70                  75                  80

Val Val His Ser Val Leu Val Met Gly Tyr Gly Gly Leu Thr Ser Leu
                85                  90                  95

Phe Asn Leu Val Val Leu Ala Trp Ala Leu Trp Thr Leu Arg Arg Leu
                100                 105                 110

Arg Glu Arg Ala Asp Ala Pro Ser Val Arg Ala Cys His Asp Thr Val
        115                 120                 125

Thr Val Leu Gly Leu Thr Val Leu Leu Gly Thr Thr Trp Ala Leu Ala
    130                 135                 140

Phe Phe Ser Phe Gly Val Phe Leu Leu Pro Gln Leu Phe Leu Phe Thr
145                 150                  155                160

Ile Leu Asn Ser Leu Tyr Gly Phe Phe Leu Phe Leu Trp Phe Cys Ser
                165                 170                 175

Gln Arg Cys Arg Ser Glu Ala Glu Ala Lys Ala Gln Ile Glu Ala Phe
            180                 185                 190

Ser Ser Xaa Gln Thr Thr Gln
            195
```

<210> 426
<211> 160
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (133)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (146)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 426
Met Ser Ser Leu Ala Ser Trp Trp Pro Ser Tyr Gly Arg Thr Gln Met

```
        1                5                    10                   15

Asn Ser Arg Ala Ser Val Ala Gly Pro Ser Trp Leu Phe Cys Ser Ala
            20               25               30

Pro Phe Pro His Cys Leu Ser Tyr Arg Ser His Cys Ser Ser Ser Cys
            35               40               45

Leu Thr Arg Pro Pro Gly Ala Trp Gln Arg Cys Ala Ser Thr Ser Cys
        50               55               60

Trp Gly Pro Trp Ser Ser Arg Ser Trp Pro Arg Gly Pro Leu Gly Pro
65                  70               75                   80

Thr Pro Arg Pro Ser Trp Ser Gly Trp Pro Asp Gly Gly Gly Ala Ala
                85               90               95

Trp Arg Trp Met Cys Ser Pro Ser Ala Arg Ser Ala Thr Arg Pro Arg
            100              105              110

Trp Ser Leu Gly Pro Pro Gly Ser Ser Trp Leu Gly Gly Ser Cys Arg
        115              120              125

Ala Glu Ala Trp Xaa Arg Leu Pro Gly Ala Gly Leu Cys His Cys Thr
        130              135              140

Pro Xaa Thr His Gly Arg Thr Trp Leu Ala Ala Thr Leu Cys Trp Thr
145                 150              155                  160
```

<210> 427
<211> 13
<212> PRT
<213> Homo sapiens

<400> 427
```
Trp Pro Ser Ser Ser Arg Thr Leu Ser Ser Ser Arg Arg
 1               5                   10
```

<210> 428
<211> 47
<212> PRT
<213> Homo sapiens

<400> 428
```
Ile Leu Lys Ser Glu Pro Lys Leu Val Ser Phe Ile Asn Ile Leu Gly
 1           5                   10                  15

Lys Glu Glu Arg Lys Lys Glu Gly Gly Arg Glu Arg Lys Lys Glu Arg
            20               25               30

Lys Lys Glu Arg Lys Lys Glu Arg Lys Lys Lys Lys Lys Asn Ser
            35               40               45
```

230

```
<210> 429
<211> 80
<212> PRT
<213> Homo sapiens

<400> 429
Met Ser Leu Ile Trp Arg Asp Val Tyr Leu Tyr Gly Cys Gly Cys Ile
  1               5                  10                  15

Cys His Gly Arg Cys Cys Ala Gly Phe Pro Gln His Ser Arg His Val
             20                  25                  30

Trp Arg Thr Asn Ala Gly Leu Ile Leu Pro Gly Asn Arg Val Pro Phe
         35                  40                  45

Cys Glu Leu Glu Gly Cys Thr Arg Arg Ser Ser Tyr Trp Asn His Leu
     50                  55                  60

Val Ile Leu Gly Gly His Trp Gly Leu His Leu Pro Cys Thr Ser Leu
 65                  70                  75                  80
```

```
<210> 430
<211> 80
<212> PRT
<213> Homo sapiens

<400> 430
Met Ser Leu Ile Trp Arg Asp Val Tyr Leu Tyr Gly Cys Gly Cys Ile
  1               5                  10                  15

Cys His Gly Arg Cys Cys Ala Gly Phe Pro Gln His Ser Arg His Val
             20                  25                  30

Trp Arg Thr Asn Ala Gly Leu Ile Leu Pro Gly Asn Arg Val Pro Phe
         35                  40                  45

Cys Glu Leu Glu Gly Cys Thr Arg Arg Ser Ser Tyr Trp Asn His Leu
     50                  55                  60

Val Ile Leu Gly Gly His Trp Gly Leu His Leu Pro Cys Thr Ser Leu
 65                  70                  75                  80
```

```
<210> 431
<211> 107
<212> PRT
<213> Homo sapiens

<220>
```

```
<221> SITE .
<222> (7)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (13)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>.
<221> SITE
<222> (17)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 431
Leu Gly Lys Val Gly Asn Xaa Cys Arg Tyr Arg Ser Xaa Ile Pro Gly
  1           5              10              15

Xaa Thr His Ala Ser Gly Leu Glu Ser Thr Phe Glu Leu Pro Glu Glu
            20              25              30

Phe Arg Phe Leu Leu Val Ser Phe Val Phe Gln Thr His Glu Met Ala
        35              40              45

Thr Asp Asp Lys Thr Ser Pro Thr Leu Asp Ser Ala Asn Asp Leu Pro
     50              55              60

Arg Ser Pro Thr Ser Ser Ser His Leu Thr His Phe Lys Pro Leu Thr
 65              70              75              80

Pro Asp Gln Asp Glu Pro Pro Phe Lys Ser Ala Tyr Ser Ser Phe Val
              85              90              95

Asn Leu Phe Arg Phe Asn Lys Gly Lys Thr Tyr
             100             105
```

```
<210> 432
<211> 46
<212> PRT
<213> Homo sapiens

<400> 432
Met Cys Cys Arg Ala Ile Ser Gly Cys Cys Gly Thr Cys Leu Ala Cys
  1           5              10              15

Leu Cys Ser Thr Ala Ser Gly Ala Pro Gln Pro Trp Pro Cys Ser Arg
            20              25              30

Gln Ser Thr Trp Arg Leu Ile Pro Arg Pro Ser Ala Pro Thr
           35              40              45
```

```
<210> 433
<211> 43
<212> PRT
<213> Homo sapiens
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232

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<220>
<221> SITE
<222> (5)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (35)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (36)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 433
Ser Gly Phe Val Xaa Ala Trp Ser Ile Leu Thr Pro Gly Cys Ile Ser
 1               5                  10                  15

Pro Ala Gly Glu Lys Cys Arg Gly Gly Lys Gln Ser Leu Gly Thr Asn
             20                  25                  30

Tyr Phe Xaa Xaa Val Leu Leu Ala Thr Asp Ser
         35                  40


<210> 434
<211> 76
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (73)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 434
Met His Leu Pro Leu Ser Thr Lys Gly Ile Leu Pro Arg Ile Leu Leu
 1               5                  10                  15

Leu Phe Ile Lys Thr Leu Phe Ala Phe Leu Leu Ser Asp Gln Cys Lys
             20                  25                  30

Gly Leu Ala His Leu Trp Leu Arg Arg Arg Glu Cys Gly Pro Gly Gly
         35                  40                  45

Leu Thr Cys Ala Ala Glu Glu Leu Lys Ser Tyr Thr Ser Ile Phe Ala
     50                  55                  60

Pro Lys Leu Gly Val Val Gly Gly Xaa Glu Met Lys
 65                  70                  75


<210> 435
<211> 38
<212> PRT
<213> Homo sapiens
```

233

<220>
<221> SITE
<222> (12)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (14)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (38)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 435
Pro Ile Ser Thr Lys Asn Arg Lys Ile Ser Arg Xaa Trp Xaa Cys Val
 1   5   10   15

Pro Val Ile Pro Ala Thr Arg Glu Ala Glu Ala Gly Glu Ser Leu Glu
            20   25   30

Pro Arg Arg Trp Arg Xaa
         35

<210> 436
<211> 74
<212> PRT
<213> Homo sapiens

<400> 436
Leu Tyr Gly Lys Ser Lys Thr Glu Val Lys Ile Ser Pro Val Ser Asn
 1   5   10   15

Leu His Ser Phe Arg Leu Gln Gly Val Ser Leu Tyr Val Glu Ala Gly
            20   25   30

Ser Leu Val Glu Phe Gln Gly Ser Lys Arg Gly Thr Asn Ile Cys Arg
         35   40   45

Phe Cys Leu Leu Trp Gly Asn Ser Phe Asn His Gln Glu Asn Ser Ser
     50   55   60

Ile Gly Phe Ile Cys Ser Gly Leu Pro Arg
 65   70

<210> 437
<211> 58
<212> PRT
<213> Homo sapiens

<400> 437
Met Ala Trp Ser Arg Ala Ala Trp Thr Val Met Arg Ser Leu Leu Ile
 1   5   10   15

Cys Trp Leu Val Ser Ala Tyr Ile Leu Ala Thr Val Thr Asp Val Gln

                    20   25   . 30

Gly Ser His Ile Gly Ile Pro Gly Ser Leu Leu Glu Leu Arg His His
        35   .   40   45   .·

Pro Arg Ser Asn Glu Ser Glu Ser Ala Cys
        50   55

<210> 438
<211> 58
<212> PRT
<213> Homo sapiens

<400> 438
Met Ala Trp Ser Arg Ala Ala Trp Thr Val Met Arg Ser Leu Leu Ile
 1   5   .   10   15

Cys Trp Leu Val Ser Ala Tyr Ile Leu Ala Thr Val Thr Asp Val Gln
            20   25   30

Gly Ser His Ile Gly Ile Pro Gly Ser Leu Leu Glu Leu Arg His His
        35   40 .   45

Pro Arg Ser Asn Glu Ser Glu Ser Ala Cys
        50   55

<210> 439
<211> 14
<212> PRT
<213> Homo sapiens

<400> 439
Trp Arg Arg Gln Ala Arg Val Glu Ser Leu Leu Pro Met Leu
 1   5   10

<210> 440
<211> 60
<212> PRT
<213> Homo sapiens

<400> 440
Met Trp Asp Leu Ser Pro Ser Thr Leu Ser Leu Leu Leu Leu Leu Ser
 1   5   10   15

Pro Cys Asp Val Pro Ala Leu Ala Leu Pro Ser Ala Met Ser Lys Ser
            20   25   30

Leu Leu Ser Leu Leu Arg Ser Arg Cys Cys His Ala Ser Trp Thr Ala
        35   40   45

Cys Arg Thr Val Asn Gln Leu Asn Leu Phe Ser Leu
        50   . .   55   60

<210> 441
<211> 6
<212> PRT
<213> Homo sapiens

<400> 441
Pro Cys Asp Val His Phe
 1   5

<210> 442
<211> 60
<212> PRT
<213> Homo sapiens

<400> 442
Met Trp Asp Leu Ser Pro Ser Thr Leu Ser Leu Leu Leu Leu Leu Ser
 1   5   10   15

Pro Cys Asp Val Pro Ala Leu Ala Leu Pro Ser Ala Met Ser Lys Ser
                20   25   30

Leu Leu Ser Leu Leu Arg Ser Arg Cys Cys His Ala Ser Trp Thr Ala
            35   40   45

Cys Arg Thr Val Asn Gln Leu Asn Leu Phe Ser Leu
        50   55   60

<210> 443
<211> 52
<212> PRT
<213> Homo sapiens

<400> 443
Met Val Glu His Leu His Leu Thr Tyr His Tyr Leu Lys Leu Pro Cys
 1   5   10   15

Ile Phe Ala Cys Leu Leu Leu Tyr Trp Phe Ser Pro Leu Leu Asn Ser
                20   25   30

Lys Leu Gln Asp Ser Arg Asp Leu Val Cys Phe Leu Asn Gln Trp His
            35   40   45

Thr Val Cys Ala
        50

<210> 444
<211> 8
<212> PRT
<213> Homo sapiens

<400> 444
Pro Cys Cys Phe Leu Cys Leu Val
 1   5

<210> 445
<211> 87
<212> PRT
<213> Homo sapiens

<400> 445
Pro Cys Cys Phe Leu Cys Leu Val Cys Ser Ser Ser Asp Ser His Lys
 1   5   10   15

Ala Ser Ser Ser Ser Ser Pro Thr Leu Ser Thr Pro Leu Pro Cys Leu
              20   25   30

Phe Ser Ser His Thr Ser Leu Leu Arg Asn Phe His Ile Ala Ser Leu
          35   40   45

Leu Leu Thr Pro Pro Gln Ala Pro Gln Gly Trp Ala Phe Pro Ala Ser
      50   55   60

Leu Thr Ala Ala Ala Leu Val Pro Gly Pro Val Pro Gly Thr Gln Leu
 65   70   75   80

Val Ala Arg Met Leu Ile Thr
              85

<210> 446
<211> 52
<212> PRT
<213> Homo sapiens

<400> 446
Met Val Glu His Leu His Leu Thr Tyr His Tyr Leu Lys Leu Pro Cys
 1   5   10   15

Ile Phe Ala Cys Leu Leu Leu Tyr Trp Phe Ser Pro Leu Leu Asn Ser
              20   25   30

Lys Leu Gln Asp Ser Arg Asp Leu Val Cys Phe Leu Asn Gln Trp His
          35   40   45

Thr Val Cys Ala
      50

<210> 447
<211> 31
<212> PRT
<213> Homo sapiens

<400> 447
Met Pro Leu Ser Arg Phe Trp Leu Leu Leu Leu Phe Leu Pro Ser His
 1   5   10   15

Ile Ser Val Leu Ser Leu Ile Arg Tyr Pro Ser Val Lys Glu Tyr
              20   25   30

237

<210> 448
<211> 31
<212> PRT
<213> Homo sapiens

<400> 448
Met Pro Leu Ser Arg Phe Trp Leu Leu Leu Leu Phe Leu Pro Ser His
 1   5   10   15

Ile Ser Val Leu Ser Leu Ile Arg Tyr Pro Ser Val Lys Glu Tyr
            20   25   30

<210> 449
<211> 43
<212> PRT
<213> Homo sapiens

<400> 449
Val Gly Ala Ser Thr Ala His Gly Leu Leu Leu Pro Leu Leu His Ile
 1   5   10   15

His Gly Gly Ser Ala Asn Ser Ser Ala Pro His His Pro Asn Pro Trp
            20   25   30

Pro Gln Ala Asp Arg Ala Trp Ser His Tyr Leu
        35   40

<210> 450
<211> 43
<212> PRT
<213> Homo sapiens

<400> 450
Val Gly Ala Ser Thr Ala His Gly Leu Leu Leu Pro Leu Leu His Ile
 1   5   10   15

His Gly Gly Ser Ala Asn Ser Ser Ala Pro His His Pro Asn Pro Trp
            20   25   30

Pro Gln Ala Asp Arg Ala Trp Ser His Tyr Leu
        35   40

<210> 451
<211> 26
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (9)
<223> Xaa equals any of the naturally occurring L-amino acids

238

<400> 451
Gln Phe Lys Gln Tyr Arg Tyr Ala Xaa Gly Met Leu Arg Gly Pro His
 1   5   10   15

Ile Pro Val Ser Tyr Pro Asn Met Tyr Phe
           20   25

<210> 452
<211> 62
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (58)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (62)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 452
Met His Phe Ala Ala Pro Phe Gln Leu Gln Ser Gln Thr Phe Arg Tyr
 1   5   10   15

Glu Val Gly Ser Val Arg Lys Ser Gln Gln Val Leu Lys Ala Val Val
           20   25   30

Thr Ala Leu Leu Ile Pro Ala Phe Ser Ser Leu Ser Ser Lys Ala Cys
           35   40   45

Lys Ala Ser Phe Gly Lys Lys Lys Lys Xaa Lys Gly Lys Xaa
         50   55   60

<210> 453
<211> 58
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (37)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (40)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (47)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 453
Glu Gln Leu Leu Glu Ser Ser Leu Ser Ser Thr Ser Cys Glu Thr Leu
1   5   10   15

Ser Ser Tyr Ala Ser Gly Arg Trp Leu Leu Ser Pro His Thr Pro Ala
            20   25   30

Cys Arg Val Arg Xaa Tyr Ile Xaa Gly Thr Asp Arg Met Trp Xaa Pro
            35   40   45

Arg Ser Met Pro Ser Ala Thr Asp Ile Ala
        50   55

<210> 454
<211> 64
<212> PRT
<213> Homo sapiens

<400> 454
Met Ser Ala Thr His Pro Val Pro Trp Ser Val Thr Thr Trp Cys Phe
1   5   10   15

Phe Cys Thr Trp Asn Ala Thr Cys Ser Ala Gly Pro Ser Pro Gly His
            20   25   30

Arg Val Ser Ser Ser Thr Ala Ser Phe Ile Arg Val Ser Tyr Phe Pro
            35   40   45

Ser Tyr Phe Ser Ser Pro Leu Ser Val Thr Cys Val Pro Val Ser Ser
        50   55   60

<210> 455
<211> 318
<212> PRT
<213> Homo sapiens

<400> 455
Glu Ala Lys Ala Gln Phe Trp Leu Leu His Ser Tyr Leu Phe Cys His
1   5   10   15

Ser Ser Asn Val Pro Asp Leu Leu Arg Pro Arg Met Thr Asn Asp Ser
            20   25   30

Glu Gly Lys Met Gly Phe Lys His Pro Lys Ile Met Gly Asn Phe Arg
            35   40   45

Gly His Ala Leu Pro Gly Thr Phe Phe Phe Ile Ile Gly Leu Trp Trp
        50   55   60

Cys Thr Lys Ser Ile Leu Lys Tyr Ile Cys Lys Lys Gln Lys Arg Thr
65   70   75   80

Cys Tyr Leu Gly Ser Lys Thr Leu Phe Tyr Arg Leu Glu Ile Leu Glu

```
                    85                    90                    95
```

Gly Ile Thr Ile Val Gly Met Ala Leu Thr Gly Met Ala Gly Glu Gln
        100   105   110

Phe Ile Pro Gly Gly Pro His Leu Met Leu Tyr Asp Tyr Lys Gln Gly
        115   120   125

His Trp Asn Gln Leu Leu Gly Trp His His Phe Thr Met Tyr Phe Phe
    130   135   140

Phe Gly Leu Leu Gly Val Ala Asp Ile Leu Cys Phe Thr Ile Ser Ser
145   150   155   160

Leu Pro Val Ser Leu Thr Lys Leu Met Leu Ser Asn Ala Leu Phe Val
                165   170   175

Glu Ala Phe Ile Phe Tyr Asn His Thr His Gly Arg Glu Met Leu Asp
            180   185   190

Ile Phe Val His Gln Leu Leu Val Leu Val Val Phe Leu Thr Gly Leu
        195   200   205

Val Ala Phe Leu Glu Phe Leu Val Arg Asn Asn Val Leu Leu Glu Leu
    210   215   220

Leu Arg Ser Ser Leu Ile Leu Leu Gln Gly Ser Trp Phe Phe Gln Ile
225   230   235   240

Gly Phe Val Leu Tyr Pro Pro Ser Gly Gly Pro Ala Trp Asp Leu Met
                245   250   255

Asp His Glu Asn Ile Leu Phe Leu Thr Ile Cys Phe Cys Trp His Tyr
            260   265   270

Ala Val Thr Ile Val Ile Val Gly Met Asn Tyr Ala Phe Ile Thr Trp
        275   280   285

Leu Val Lys Ser Arg Leu Lys Arg Leu Cys Ser Ser Glu Val Gly Leu
    290   295   300

Leu Lys Asn Ala Glu Arg Glu Gln Glu Ser Glu Glu Glu Met
305   310   315

```
<210> 456
<211> 24
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (2)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 456
```
Leu Xaa Lys Leu Lys Met Phe Tyr Lys Phe Ala Phe Lys Phe Ser Tyr
  1   5   10   15

Glu Ala Ile Cys Lys Leu His Thr
                20

<210> 457
<211> 19
<212> PRT
<213> Homo sapiens

<400> 457
Met Val Ser Ile Leu Tyr Leu Gly Leu Phe Phe Leu Asn Ser Ser Val
  1   5   10   15

Leu Tyr Ala

<210> 458
<211> 282
<212> PRT
<213> Homo sapiens

<400> 458
Val Asn Arg Pro Ser Trp Ile Met Gly Asn Phe Arg Gly His Ala Leu
  1   5   10   15

Pro Gly Thr Phe Phe Phe Ile Ile Gly Leu Trp Trp Cys Thr Lys Ser
            20   25   30

Ile Leu Lys Tyr Ile Cys Lys Lys Gln Lys Arg Thr Cys Tyr Leu Gly
            35   40   45

Ser Lys Thr Leu Phe Tyr Arg Leu Glu Ile Leu Glu Gly Ile Thr Ile
        50   55   60

Val Gly Met Ala Leu Thr Gly Met Ala Gly Glu Gln Phe Ile Pro Gly
 65   70   75   80

Gly Pro His Leu Met Leu Tyr Asp Tyr Lys Gln Gly His Trp Asn Gln
                85   90   95

Leu Leu Gly Trp His His Phe Thr Met Tyr Phe Phe Phe Gly Leu Leu
            100   105   110

Gly Val Ala Asp Ile Leu Cys Phe Thr Ile Ser Ser Leu Pro Val Ser
            115   120   125

Leu Thr Lys Leu Met Leu Ser Asn Ala Leu Phe Val Glu Ala Phe Ile
        130   135   140

Phe Tyr Asn His Thr His Gly Arg Glu Met Leu Asp Ile Phe Val His
145   150   155   160

Gln Leu Leu Val Leu Val Val Phe Leu Thr Gly Leu Val Ala Phe Leu
                165   170   175

Glu Phe Leu Val Arg Asn Asn Val Leu Leu Glu Leu Leu Arg Ser Ser
            180   185   190

242

```
Leu Ile Leu Leu Gln Gly Ser Trp Phe Phe Gln Ile Gly Phe Val Leu
        195             200             205
```

```
Tyr Pro Pro Ser Gly Gly Pro Ala Trp Asp Leu Met Asp His Glu Asn
    210             215             220
```

```
Ile Leu Phe Leu Thr Ile Cys Phe Cys Trp His Tyr Ala Val Thr Ile
225             230             235                     240
```

```
Val Ile Val Gly Met Asn Tyr Ala Phe Ile Thr Trp Leu Val Lys Ser
            245             250             255
```

```
Arg Leu Lys Arg Leu Cys Ser Ser Glu Val Gly Leu Leu Lys Asn Ala
        260             265             270
```

```
Glu Arg Glu Gln Glu Ser Glu Glu Glu Met
        275             280
```

```
<210> 459
<211> 19
<212> PRT
<213> Homo sapiens
```

```
<400> 459
Met Val Ser Ile Leu Tyr Leu Gly Leu Phe Phe Leu Asn Ser Ser Val
 1               5               10                  15
```

```
Leu Tyr Ala
```

```
<210> 460
<211> 47
<212> PRT
<213> Homo sapiens
```

```
<400> 460
Met Arg Val Gln Glu Leu Leu Leu Phe Leu Val Gly Gly Gly Val Thr
 1               5               10                  15
```

```
Glu Gly Cys Thr Glu Glu Val Thr Pro Leu Cys Leu Phe Leu Ala Asn
            20              25              30
```

```
Asn Glu Val Leu Arg Thr Leu Thr Cys Arg Gln Ser Leu Ala Gln
            35              40              45
```

```
<210> 461
<211> 136
<212> PRT
<213> Homo sapiens
```

```
<400> 461
Ser Ala Gln Ala Leu His His Pro Pro His Gln Gly Pro Pro Leu Phe
 1               5               10                  15
```

Pro Ser Ser Ala His Pro Thr Val Pro Pro Tyr Pro Ser Gln Ala Thr
            20   25   30

His His Thr Thr Leu Gly Pro Gly Pro Gln His Gln Pro Ser Gly Thr
         35   40   45

Gly Pro His Cys Pro Leu Pro Val Thr Gly Pro His Leu Gln Pro Gln
    50   55   60

Gly Pro Asn Ser Ile Pro Thr Pro Thr Ala Ser Gly Phe Cys Pro His
 65   70   75   80

Pro Gly Ser Val Ala Leu Pro Trp Gly Phe Lys Asp Leu Ser Arg His
                85   90   95

Leu Gln Cys Leu Asp Arg Phe Gln Phe Thr Glu His Arg Cys His Gln
            100   105   110

His Phe Lys Thr Ile Thr Met Gly Gln Gly Gly Ile Lys Met Asp Ser
        115   120   125

Lys Asn Ile Phe Leu Asn Val Leu
    130   135

<210> 462
<211> 58
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (52)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 462
Met Ala Val Phe Leu Ile Ser Ser Ser Tyr Phe Leu Leu Cys Val Phe
 1   5   10   15

Thr Ile Arg Ser Leu Arg Ala Trp Val Leu Pro Phe Thr Ser Val Pro
            20   25   30

Arg Ala Gln Gly Gly Ser Cys Cys Arg Ser Gln Trp Leu Tyr Lys Thr
        35   40   45

Leu Pro Pro Xaa Leu Val Cys Lys Pro Val
    50   55

<210> 463
<211> 58
<212> PRT
<213> Homo sapiens

<400> 463
Met Ala Val Phe Leu Ile Ser Ser Ser Tyr Phe Leu Leu Cys Val Phe
 1   5   10   15

244

```
Thr Ile Arg Ser Leu Arg Ala Trp Val Leu Pro Phe Thr Ser Val Pro
         20                  25                  30

Arg Ala Gln Gly Gly Ser Cys Cys Arg Ser Gln Trp Leu Tyr Lys Thr
         35                  40                  45

Leu Pro Pro Cys Leu Val Cys Lys Pro Val
     50                  55
```

<210> 464
<211> 58
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (52)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 464
```
Met Ala Val Phe Leu Ile Ser Ser Ser Tyr Phe Leu Leu Cys Val Phe
 1               5                  10                  15

Thr Ile Arg Ser Leu Arg Ala Trp Val Leu Pro Phe Thr Ser Val Pro
         20                  25                  30

Arg Ala Gln Gly Gly Ser Cys Cys Arg Ser Gln Trp Leu Tyr Lys Thr
         35                  40                  45

Leu Pro Pro Xaa Leu Val Cys Lys Pro Val
     50                  55
```

<210> 465
<211> 58
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (19)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (25)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (28)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (46)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 465
Ser Arg Cys Ala Gly Ala Pro Leu Gln Asn Asn Gly Pro Val Arg Glu
 1   5   10   15

Ala Thr Xaa Leu Thr Leu Gln Asn Xaa Gly Pro Xaa Arg Glu Ala Thr
            20   25   30

His Leu Thr Leu Gln Asn Asn Gly Pro Met Arg Glu Ala Xaa His Leu
            35   40   45

Val Leu His Lys Trp Ser Ile Cys Leu Arg
        50   55

<210> 466
<211> 27
<212> PRT
<213> Homo sapiens

<400> 466
Met Pro Tyr Gly Pro Asp Pro Ile Leu Ser Asn Val Leu Leu Ala Gly
 1   5   10   15

Tyr Ile Val Leu Gln Thr Leu Ser Cys Pro Arg
            20   25

<210> 467
<211> 139
<212> PRT
<213> Homo sapiens

<400> 467
Met Val Thr Val Gly Leu Val Ile Cys Phe Ser Glu Trp Cys Cys Ala
 1   5   10   15

Gly Gly Leu Ser Ala Glu Gln Thr Val Ser Asp Lys His Ile Asp Ala
            20   25   30

Leu Met Lys Glu Lys Glu Ala Gly Lys Ser Ser Gly His Tyr Asp Pro
        35   40   45

Arg His Gln Gly Gln Ala Leu Glu Glu Pro Ser Val His Ser Cys Ile
        50   55   60

Tyr Tyr Leu Leu Thr Glu Gln Thr Gln Lys Val Ser Thr Arg Thr Ser
 65   70   75   80

Leu Leu Arg Tyr Arg Trp Pro Cys Glu Glu Val Gly Trp Cys Trp Gly
            85   90   95

Leu Asp Leu Thr Gly Cys Pro Val Val Ile Gln His Glu Gly Val Ala
            100   105   110

Gly Ser Glu Ile Ile Ile Ser Asp Tyr Pro Leu Thr Asn Glu Asn Ile
            115   120   125

246

Lys Gly Ile Pro Glu Ile Cys Leu Phe His Ile
    130   135

<210> 468
<211> 43
<212> PRT
<213> Homo sapiens

<400> 468
Met Leu Ala Ile Lys Val Leu Ile Val Val Phe Leu Leu Gln Leu Ser
1   5   10   15

Trp Cys Phe Leu Leu Val Leu Leu Phe His Ser Leu Ile Lys Gly Thr
            20   25   30

Met Ile Asp Ile Pro Ala Pro Tyr Lys Glu Ile
        35   40

<210> 469
<211> 38
<212> PRT
<213> Homo sapiens

<400> 469
Cys Phe Leu Leu Ala Asp Val Gly Asn Ser Ile Ile Phe Ile Thr Asn
1   5   10   15

Phe Met Glu Gln His Gln Phe Arg Val Lys Leu Glu Asn Gln Cys Ile
            20   25   30

Leu Ile Phe Val Asp Tyr
        35

<210> 470
<211> 4
<212> PRT
<213> Homo sapiens

<400> 470
Val Gly Phe Leu
1

<210> 471
<211> 77
<212> PRT
<213> Homo sapiens

<400> 471
Ala Pro Arg Arg Gln Ala Gln Glu Trp Leu Gly Arg Thr Gly Asn Thr
1   5   10   15

```
Phe Ala Pro Arg Leu Ala Val Thr Ser Val Lys Ala Asp Arg Arg Glu
            20              25              30

Met Gly Pro Ser Ser Ser Val Val Ala Ala Ser Pro Ser Leu Gln Asp
            35              40              45

Arg Val Ile Ile Thr Ile Asn Asn Pro Ser Arg Val Lys Lys Lys Lys
    50              55              60

Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys
65              70              75
```

<210> 472
<211> 245
<212> PRT
<213> Homo sapiens

<400> 472

```
Ala Trp Arg Arg Arg Ser Gly Thr Ser Gly Lys Ala Thr Trp Trp
 1           5               10              15

Cys Ser Gly Leu Arg Arg Ala Ser Pro Thr Pro Ser Arg Arg Val Gln
            20              25              30

Ser Trp Ala Thr Ala Val Met Trp Lys Pro Ser Pro Ser Ser Ser Pro
            35              40              45

Ala Ser Trp Ser Cys Thr Ala Leu Arg Ala Pro Gln Ser Cys Leu Arg
    50              55              60

Ala Ala Thr Val Arg Pro Val Thr Leu Gln Ala Arg Ala Asp Ser Pro
 65              70              75              80

Thr Val Pro Glu Pro Val His Arg Pro Gln Asp Pro Trp His Ile Pro
            85              90              95

Gly Val Pro Glu Pro Val His Arg Pro Gln Asp Pro Trp His Ile Pro
            100             105             110

Gly Val Pro Glu Pro Val His Arg Pro Gln Asp Pro Trp His Ile Pro
            115             120             125

Gly Val Pro Glu Pro Val His Arg Pro Gln Asp Pro Trp Pro Trp Leu
    130             135             140

Gln Leu Val Pro Pro Ala Glu Leu Ala Tyr Cys Leu Leu Met Leu Leu
145             150             155             160

Leu Ala His Cys Met Lys Gln Gln Ala Arg Pro Gly His Pro Asp Phe
            165             170             175

Leu His Arg Glu Ala Trp Ala Cys Leu Ser Ala Ala Gly Gly Leu Ala
            180             185             190

Ser Pro Gly Leu Leu Leu Trp Ala Thr Ala Arg Pro Arg Ala Ser Gly
            195             200             205

Glu Ala Gly Pro Gly Arg Ala Leu Val Gly Ala Asp Ala Ala Cys Cys
```

                                   248

```
        210                    215                    220

Pro Arg His Ser Val Leu Ser Leu Val Asp Ile Pro Ser Gly Gln Val
225                 230                 235                 240

Leu Pro Gln Gly Gln
                245



<210> 473
<211> 43
<212> PRT
<213> Homo sapiens

<400> 473
Met Ala Ala Arg Gly Arg Ser Gly Val Gly Pro Pro Gly Phe Leu Arg
 1               5                  10                  15

Ala Leu Ala Leu Leu Gln Leu Ser Cys Gly Phe Tyr Trp Ala Cys Ser
            20                  25                  30

Arg Gly Trp Met Val Arg Gly Thr Pro His Pro
        35                  40



<210> 474
<211> 43
<212> PRT
<213> Homo sapiens

<400> 474
Met Ala Ala Arg Gly Arg Ser Gly Val Gly Pro Pro Gly Phe Leu Arg
 1               5                  10                  15

Ala Leu Ala Leu Leu Gln Leu Ser Cys Gly Phe Tyr Trp Ala Cys Ser
            20                  25                  30

Arg Gly Trp Met Val Arg Gly Thr Pro His Pro
        35                  40



<210> 475
<211> 43
<212> PRT
<213> Homo sapiens

<400> 475
Met Phe Asn Leu Ser Phe Phe Thr Leu Tyr Gly Leu Cys Met Leu Lys
 1               5                  10                  15

Leu His Ser Ala Ser Ser Trp Phe Thr Leu Leu Leu Leu Ile Ser Leu
            20                  25                  30

Phe Leu Ser Val Val Tyr Cys Gln Ser Thr Asn
        35                  40
```

<210> 476
<211> 2
<212> PRT
<213> Homo sapiens

<400> 476
Leu His
  1

<210> 477
<211> 43
<212> PRT
<213> Homo sapiens.

<400> 477
Met Phe Asn Leu Ser Phe Phe Thr Leu Tyr Gly Leu Cys Met Leu Lys
  1   5   10   15

Leu His Ser Ala Ser Ser Trp Phe Thr Leu Leu Leu Leu Ile Ser Leu
              20   25   30

Phe Leu Ser Val Val Tyr Cys Gln Ser Thr Asn
          35   40

<210> 478
<211> 47
<212> PRT
<213> Homo sapiens

<400> 478
Met Ser Leu Leu Leu Pro Pro Leu Ala Leu Leu Leu Leu Leu Ala Ala
  1   5   10   15

Leu Val Ala Pro Ala Thr Ala Ala Thr Ala Tyr Arg Pro Asp Trp Asn
              20   25   30

Arg Leu Ser Gly Leu Thr Arg Ala Arg Val Glu Thr Cys Gly Gly
          35   40   45

<210> 479
<211> 47
<212> PRT
<213> Homo sapiens

<400> 479
Met Ser Leu Leu Leu Pro Pro Leu Ala Leu Leu Leu Leu Leu Ala Ala
  1   5   10   15

Leu Val Ala Pro Ala Thr Ala Ala Thr Ala Tyr Arg Pro Asp Trp Asn
              20   25   30

Arg Leu Ser Gly Leu Thr Arg Ala Arg Val Glu Thr Cys Gly Gly
          35   40   45

250

<210> 480
<211> 365
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (313)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (316)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (333)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (335)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (338)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (339)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (352)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (355)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 480
Met Leu Ser Gly Val Trp Phe Leu Ser Val Leu Thr Val Ala Gly Ile
 1   5   10   15

Leu Gln Thr Glu Ser Arg Lys Thr Ala Lys Asp Ile Cys Lys Ile Arg
            20   25   30

Cys Leu Cys Glu Glu Lys Glu Asn Val Leu Asn Ile Asn Cys Glu Asn
         35   40   45

Lys Gly Phe Thr Thr Val Ser Leu Leu Gln Pro Pro Gln Tyr Arg Ile
     50   55   60

251

```
Tyr Gln Leu Phe Leu Asn Gly Asn Leu Leu Thr Arg Leu Tyr Pro Asn
 65              70               75               80

Glu Phe Val Asn Tyr Ser Asn Ala Val Thr Leu His Leu Gly Asn Asn
             85               90               95

Gly Leu Gln Glu Ile Arg Thr Gly Ala Phe Ser Gly Leu Lys Thr Leu
            100              105              110

Lys Arg Leu His Leu Asn Asn Asn Lys Leu Glu Ile Leu Arg Glu Asp
         115              120              125

Thr Phe Leu Gly Leu Glu Ser Leu Glu Tyr Leu Gln Ala Asp Tyr Asn
    130              135              140

Tyr Ile Ser Ala Ile Glu Ala Gly Ala Phe Ser Lys Leu Asn Lys Leu
145              150              155              160

Lys Val Leu Ile Leu Asn Asp Asn Leu Leu Leu Ser Leu Pro Ser Asn
             165              170              175

Val Phe Arg Phe Val Leu Leu Thr His Leu Asp Leu Arg Gly Asn Arg
        180              185              190

Leu Lys Val Met Pro Phe Ala Gly Val Leu Glu His Ile Gly Gly Ile
         195              200              205

Met Glu Ile Gln Leu Glu Glu Asn Pro Trp Asn Cys Thr Cys Asp Leu
    210              215              220

Leu Pro Leu Lys Ala Trp Leu Asp Thr Ile Thr Val Phe Val Gly Glu
225              230              235              240

Ile Val Cys Glu Thr Pro Phe Arg Leu His Gly Lys Asp Val Thr Gln
             245              250              255

Leu Thr Arg Gln Asp Leu Cys Pro Arg Lys Ser Ala Ser Asp Ser Ser
             260              265              270

Gln Arg Gly Ser His Ala Asp Thr His Val Gln Arg Leu Ser Pro Thr
         275              280              285

Met Asn Pro Ala Leu Asn Pro Thr Arg Ala Pro Lys Ala Ser Arg Pro
    290              295              300

Pro Lys Met Arg Asn Arg Pro Thr Xaa Arg Val Xaa Val Ser Lys Asp
305              310              315              320

Arg Gln Ser Phe Gly Pro Ile Met Val Tyr Gln Thr Xaa Val Xaa Cys
             325              330              335

Ala Xaa Xaa Leu Ser Gln Gln Leu Cys Leu His Leu Ser Glu Leu Xaa
         340              345              350

Gln Trp Xaa Glu Cys Lys Leu Pro Arg Lys Glu Val His
         355              360              365
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<210> 481
<211> 23
<212> PRT
<213> Homo sapiens

<400> 481
Gly Tyr Trp Val Ser Phe Leu Leu His Val Asp Gly Val Leu Ala His
1   5   10   15

Leu Thr Thr Gly Gly Gly Ile
            20

<210> 482
<211> 191
<212> PRT
<213> Homo sapiens

<400> 482
Met Leu Ser Gly Val Trp Phe Leu Ser Val Leu Thr Val Ala Gly Ile
1   5   10   15

Leu Gln Thr Glu Ser Arg Lys Thr Ala Lys Asp Ile Cys Lys Ile Arg
                20   25   30

Cys Leu Cys Glu Glu Lys Glu Asn Val Leu Asn Ile Asn Cys Glu Asn
            35   40   45

Lys Gly Phe Thr Thr Val Ser Leu Leu Gln Pro Pro Gln Tyr Arg Ile
        50   55   60

Tyr Gln Leu Phe Leu Asn Gly Asn Leu Leu Thr Arg Leu Tyr Pro Asn
65   70   75   80

Glu Phe Val Asn Tyr Ser Asn Ala Val Thr Leu His Leu Gly Asn Asn
                85   90   95

Gly Leu Gln Glu Ile Arg Thr Gly Ala Phe Ser Gly Leu Lys Thr Leu
            100   105   110

Lys Arg Leu His Leu Asn Asn Asn Lys Leu Glu Ile Leu Arg Glu Asp
        115   120   125

Thr Phe Leu Gly Leu Glu Ser Leu Glu Tyr Leu Gln Ala Asp Tyr Asn
    130   135   140

Tyr Ile Ser Ala Ile Glu Ala Gly Ala Phe Ser Lys Leu Asn Lys Leu
145   150   155   160

Lys Val Leu Ile Leu Asn Asp Asn Leu Leu Leu Ser Leu Pro Ser Asn
                165   170   175

Val Phe Arg Phe Val Leu Leu Thr His Leu Asp Leu Arg Gly Asn
            180   185   190

<210> 483
<211> 845

253

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<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (477)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 483
Met Leu Ser Gly Val Trp Phe Leu Ser Val Leu Thr Val Ala Gly Ile
 1               5                  10                  15

Leu Gln Thr Glu Ser Arg Lys Thr Ala Lys Asp Ile Cys Lys Ile Arg
            20                  25                  30

Cys Leu Cys Glu Glu Lys Glu Asn Val Leu Asn Ile Asn Cys Glu Asn
        35                  40                  45

Lys Gly Phe Thr Thr Val Ser Leu Leu Gln Pro Pro Gln Tyr Arg Ile
    50                  55                  60

Tyr Gln Leu Phe Leu Asn Gly Asn Leu Leu Thr Arg Leu Tyr Pro Asn
65                  70                  75                  80

Glu Phe Val Asn Tyr Ser Asn Ala Val Thr Leu His Leu Gly Asn Asn
                85                  90                  95

Gly Leu Gln Glu Ile Arg Thr Gly Ala Phe Ser Gly Leu Lys Thr Leu
            100                 105                 110

Lys Arg Leu His Leu Asn Asn Asn Lys Leu Glu Ile Leu Arg Glu Asp
        115                 120                 125

Thr Phe Leu Gly Leu Glu Ser Leu Glu Tyr Leu Gln Ala Asp Tyr Asn
    130                 135                 140

Tyr Ile Ser Ala Ile Glu Ala Gly Ala Phe Ser Lys Leu Asn Lys Leu
145                 150                 155                 160

Lys Val Leu Ile Leu Asn Asp Asn Leu Leu Leu Ser Leu Pro Ser Asn
                165                 170                 175

Val Phe Arg Phe Val Leu Leu Thr His Leu Asp Leu Arg Gly Asn Arg
            180                 185                 190

Leu Lys Val Met Pro Phe Ala Gly Val Leu Glu His Ile Gly Gly Ile
        195                 200                 205

Met Glu Ile Gln Leu Glu Glu Asn Pro Trp Asn Cys Thr Cys Asp Leu
    210                 215                 220

Leu Pro Leu Lys Ala Trp Leu Asp Thr Ile Thr Val Phe Val Gly Glu
225                 230                 235                 240

Ile Val Cys Glu Thr Pro Phe Arg Leu His Gly Lys Asp Val Thr Gln
            245                 250                 255

Leu Thr Arg Gln Asp Leu Cys Pro Arg Lys Ser Ala Ser Asp Ser Ser
            260                 265                 270
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254

```
Gln Arg Gly Ser His Ala Asp Thr His Val Gln Arg Leu Ser Pro Thr
        275             280             285

Met Asn Pro Ala Leu Asn Pro Thr Arg Ala Pro Lys Ala Ser Arg Pro
        290             295             300

Pro Lys Met Arg Asn Arg Pro Thr Pro Arg Val Thr Val Ser Lys Asp
305             310             315             320

Arg Gln Ser Phe Gly Pro Ile Met Val Tyr Gln Thr Lys Ser Pro Val
            325             330             335

Pro Leu Thr Cys Pro Ser Ser Cys Val Cys Thr Ser Gln Ser Ser Asp
        340             345             350

Asn Gly Leu Asn Val Asn Cys Gln Glu Arg Lys Phe Thr Asn Ile Ser
        355             360             365

Asp Leu Gln Pro Lys Pro Thr Ser Pro Lys Lys Leu Tyr Leu Thr Gly
    370             375             380

Asn Tyr Leu Gln Thr Val Tyr Lys Asn Asp Leu Leu Glu Tyr Ser Ser
385             390             395             400

Leu Asp Leu Leu His Leu Gly Asn Asn Arg Ile Ala Val Ile Gln Glu
            405             410             415

Gly Ala Phe Thr Asn Leu Thr Ser Leu Arg Arg Leu Tyr Leu Asn Gly
        420             425             430

Asn Tyr Leu Glu Val Leu Tyr Pro Ser Met Phe Asp Gly Leu Gln Ser
        435             440             445

Leu Gln Tyr Leu Tyr Leu Glu Tyr Asn Val Ile Lys Glu Ile Lys Pro
    450             455             460

Leu Thr Phe Asp Ala Leu Ile Asn Leu Gln Leu Leu Xaa Leu Asn Asn
465             470             475             480

Asn Leu Leu Arg Ser Leu Pro Asp Asn Ile Phe Gly Gly Thr Ala Leu
            485             490             495

Thr Arg Leu Asn Leu Arg Asn Asn His Phe Ser His Leu Pro Val Lys
        500             505             510

Gly Val Leu Asp Gln Leu Pro Ala Phe Ile Gln Ile Asp Leu Gln Glu
        515             520             525

Asn Pro Trp Asp Cys Thr Cys Asp Ile Met Gly Leu Lys Asp Trp Thr
    530             535             540

Glu His Ala Asn Ser Pro Val Ile Ile Asn Glu Val Thr Cys Glu Ser
545             550             555             560

Pro Ala Lys His Ala Gly Glu Ile Leu Lys Phe Leu Gly Arg Glu Ala
            565             570             575

Ile Cys Pro Asp Ser Pro Asn Leu Ser Asp Gly Thr Val Leu Ser Met
            580             585             590
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255

```
Asn His Asn Thr Asp Thr Pro Arg Ser Leu Ser Val Ser Pro Ser Ser
        595             600             605

Tyr Pro Glu Leu His Thr Glu Val Pro Leu Ser Val Leu Ile Leu Gly
        610             615             620

Leu Leu Val Val Phe Ile Leu Ser Val Cys Phe Gly Ala Gly Leu Phe
625             630             635             640

Val Phe Val Leu Lys Arg Arg Lys Gly Val Pro Ser Val Pro Arg Asn
                645             650             655

Thr Asn Asn Leu Asp Val Ser Ser Phe Gln Leu Gln Tyr Gly Ser Tyr
            660             665             670

Asn Thr Glu Thr His Asp Lys Thr Asp Gly His Val Tyr Asn Tyr Ile
        675             680             685

Pro Pro Pro Val Gly Gln Met Cys Gln Asn Pro Ile Tyr Met Gln Lys
    690             695             700

Glu Gly Asp Pro Val Ala Tyr Tyr Arg Asn Leu Gln Glu Phe Ser Tyr
705             710             715             720

Ser Asn Leu Glu Glu Lys Lys Glu Glu Pro Ala Thr Pro Ala Tyr Thr
            725             730             735

Ile Ser Ala Thr Glu Leu Leu Glu Lys Gln Ala Thr Pro Arg Glu Pro
            740             745             750

Glu Leu Leu Tyr Gln Asn Ile Ala Glu Arg Val Lys Glu Leu Pro Ser
        755             760             765

Ala Gly Leu Val His Tyr Asn Phe Cys Thr Leu Pro Lys Arg Gln Phe
    770             775             780

Ala Pro Ser Tyr Glu Ser Arg Arg Gln Asn Gln Asp Arg Ile Asn Lys
785             790             795             800

Thr Val Leu Tyr Gly Thr Pro Arg Lys Cys Phe Val Gly Gln Ser Lys
            805             810             815

Pro Asn His Pro Leu Leu Gln Ala Lys Pro Gln Ser Glu Pro Asp Tyr
            820             825             830

Leu Glu Val Leu Glu Lys Gln Thr Ala Ile Ser Gln Leu
        835             840             845
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<210> 484
<211> 141
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (125)
<223> Xaa equals any of the naturally occurring L-amino acids.
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<220>
<221> SITE
<222> (131)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 484
Phe Cys Leu Leu His Val Pro Ala Ser Cys Tyr Cys Ser Phe Ser Asn
  1               5                  10                  15

Gly Ile Thr Ser Pro Cys His Ala Leu Gly Ser Pro Ser Leu Ser Ile
              20                  25                  30

Ser Val Leu Leu Ser Trp Leu Asn Pro Ser Thr Ile Leu Asn Thr Gly
              35                  40                  45

Ser Ser Cys Pro Ile Pro Arg Leu Thr Leu Ser Asp Leu Pro Ile Ser
          50                  55                  60

Leu Ala Phe His Ala Pro Leu Pro Pro Pro Gly Phe Asn Trp Val
  65                  70                  75                  80

Arg Ala Val Phe Leu Pro Leu Cys Ser Ala Ser Ala Leu Arg Thr Pro
                  85                  90                  95

Arg Gly Leu Gly Gly Lys Val Leu Thr Ile Phe Thr Leu Cys Leu Pro
              100                 105                 110

Leu His His Leu Phe Ile Thr Ser Gln Pro Leu Leu Xaa Gln Val Phe
          115                 120                 125

Thr His Xaa Leu Phe Leu Gln Val Phe Asp Trp Arg Glu
      130                 135                 140
```

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<210> 485
<211> 8
<212> PRT
<213> Homo sapiens

<400> 485
Ser His Ile Val Thr Cys Leu Gly
  1               5
```

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<210> 486
<211> 42
<212> PRT
<213> Homo sapiens

<400> 486
Met Gly Leu Lys Asn Ser Ser Leu Ile Thr Cys Phe Leu Leu Ala Phe
  1               5                  10                  15

Val Val Phe Val Leu Phe Cys Leu Phe Cys Phe Val Phe Leu Cys Tyr
              20                  25                  30

Phe Ile Gly Lys Val Ser Gly Met Cys Ser
          35                  40
```

257

<210> 487
<211> 42
<212> PRT
<213> Homo sapiens

<400> 487
Met Gly Leu Lys Asn Ser Ser Leu Ile Thr Cys Phe Leu Leu Ala Phe
1   5   10   15

Val Val Phe Val Leu Phe Cys Leu Phe Cys Phe Val Phe Leu Cys Tyr
            20   25   30

Phe Ile Gly Lys Val Ser Gly Met Cys Ser
        35   40

<210> 488
<211> 27
<212> PRT
<213> Homo sapiens

<400> 488
Met Arg Arg Met Ala Ser Ala Leu Leu Leu Asp Gln Leu Thr Lys Ala
1   5   10   15

Leu Leu Ser Gly His Gln Asn Trp Lys Ala Phe
            20   25

<210> 489
<211> 137
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (1)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (7)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (33)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 489
Xaa Arg Cys Phe Thr Phe Xaa Phe Thr Asp Ile Val Ile Met Pro Lys
1   5   10   15

Arg Lys Phe Pro Glu Asn Thr Glu Gly Lys Asp Gly Ser Lys Val Thr
            20   25   30

258

Xaa Gln Glu Pro Thr Arg Arg Ser Ala Arg Leu Ser Ala Lys Pro Ala
        35   40   45

Pro Pro Lys Pro Glu Pro Lys Pro Arg Lys Thr Ser Ala Lys Lys Glu
    50   55   60

Pro Gly Ala Lys Ile Ser Arg Gly Ala Lys Gly Lys Lys Glu Glu Lys
65   70   75   80

Gln Glu Ala Gly Lys Glu Gly Thr Ala Pro Ser Glu Asn Gly Glu Thr
            85   90   95

Lys Ala Glu Glu Ile His Ile Ser Arg Ser Thr Val Asn Val Ser Thr
            100   105   110

Ser Arg Gly Thr Pro Pro Ser Thr Leu Ser Val Lys Gly Gln Ile Glu
        115   120   125

Thr Val Arg Val Lys Gly Thr Glu Asn
    130   135

<210> 490
<211> 46
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (38)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 490
Asn Lys Pro Asp Thr Gly Arg Lys Ile Leu His Asp Leu Ile Cys Gly
  1   5   10   15

Ile Leu Lys Lys Lys Lys Lys Ser Gln Ile Tyr Arg Val Asn Lys
            20   25   30

Arg Val Gly Tyr Gln Xaa Gln Val Gly Gly Glu Trp Glu Met
        35   40   45

<210> 491
<211> 50
<212> PRT
<213> Homo sapiens

<400> 491
Met Gln Pro Pro Phe Val Leu Thr Thr Thr Thr Met Ile Ser Leu Phe
  1   5   10   15

Leu Ala Leu Ile Ser Thr Lys Lys Val His Leu Thr Ile Pro Gln Pro
            20   25   30

Phe Thr Ser His Ser Arg Leu Ser Phe Asp Val Phe Lys Arg Lys Ala
            35   40   45

259

Arg Ala
      50

<210> 492
<211> 228
<212> PRT
<213> Homo sapiens

<400> 492
Thr Gln Asp His Gln Lys Leu Cys Tyr Ser Ala Leu Ile Leu Ala Met
  1   5   10   15

Val Phe Ser Met Gly Glu Ala Val Pro Tyr Ala His Tyr Glu His Leu
              20   25   30

Gly Thr Pro Phe Ala Gln Phe Leu Leu Asn Ile Val Glu Asp Gly Leu
          35   40   45

Pro Leu Asp Thr Thr Glu Gln Leu Pro Asp Leu Cys Val Asn Leu Leu
      50   55   60

Leu Ala Leu Asn Leu His Leu Pro Ala Ala Asp Gln Asn Val Ile Met
 65   70   75   80

Ala Ala Leu Ser Lys His Ala Asn Val Lys Ile Phe Ser Glu Lys Leu
              85   90   95

Leu Leu Leu Leu Asn Arg Gly Asp Asp Pro Val Arg Ile Phe Lys His
             100   105   110

Glu Pro Gln Pro Pro His Ser Val Leu Lys Phe Leu Gln Asp Val Phe
         115   120   125

Gly Ser Pro Ala Thr Ala Ala Ile Phe Tyr His Thr Asp Met Met Ala
         130   135   140

Leu Ile Asp Ile Thr Val Arg His Ile Ala Asp Leu Ser Pro Gly Asp
145   150   155   160

Lys Leu Arg Met Glu Tyr Leu Ser Leu Met His Ala Ile Val Arg Thr
                165   170   175

Thr Pro Tyr Leu Gln His Arg His Arg Leu Pro Asp Leu Gln Ala Ile
             180   185   190

Leu Arg Arg Ile Leu Asn Glu Glu Glu Thr Ser Pro Gln Cys Gln Met
         195   200   205

Asp Arg Met Ile Val Arg Glu Met Cys Lys Glu Phe Leu Val Leu Gly
   210   215   220

Glu Ala Pro Ser
225

<210> 493

<211> 13
<212> PRT
<213> Homo sapiens

<400> 493
Pro Phe His Phe Ser Thr Pro Ser Ile Thr Gly Leu Phe
1   5   10

<210> 494
<211> 2
<212> PRT
<213> Homo sapiens

<400> 494
Phe Leu
1

<210> 495
<211> 50
<212> PRT
<213> Homo sapiens

<400> 495
Met Gln Pro Pro Phe Val Leu Thr Thr Thr Thr Met Ile Ser Leu Phe
1   5   10   15

Leu Ala Leu Ile Ser Thr Lys Lys Val His Leu Thr Ile Pro Gln Pro
            20   25   30

Phe Thr Ser His Ser Arg Leu Ser Phe Asp Val Phe Lys Arg Lys Ala
        35   40   45

Arg Ala
    50

<210> 496
<211> 71
<212> PRT
<213> Homo sapiens

<400> 496
Met Phe Ile Phe Ile Leu Met Ile His Leu Ile Tyr Met Trp Ile Gln
1   5   10   15

Gly Thr Lys Phe Met Tyr Lys Ser Ser His Leu Met Asn Val Asp Thr
            20   25   30

Phe Leu Glu Asn Ile Tyr Gln Cys Glu Asn Phe Phe Asn Thr Leu Thr
        35   40   45

Thr Lys Ile Lys Tyr Ser Leu Ile Ser Leu Phe Asn Lys His Gln Asn
    50   55   60

Asn Val Ser Val Phe Ile Leu

261

65   70

<210> 497
<211> 14
<212> PRT
<213> Homo sapiens

<400> 497
Leu Phe Ile Leu Val Leu His Asn Glu Asp Asn Leu Tyr Gly
  1   5   10

<210> 498
<211> 71
<212> PRT
<213> Homo sapiens

<400> 498
Met Phe Ile Phe Ile Leu Met Ile His Leu Ile Tyr Met Trp Ile Gln
  1   5   10   15

Gly Thr Lys Phe Met Tyr Lys Ser Ser His Leu Met Asn Val Asp Thr
                20   25   30

Phe Leu Glu Asn Ile Tyr Gln Cys Glu Asn Phe Phe Asn Thr Leu Thr
            35   40   45

Thr Lys Ile Lys Tyr Ser Leu Ile Ser Leu Phe Asn Lys His Gln Asn
       50   55   60

Asn Val Ser Val Phe Ile Leu
 65   70

<210> 499
<211> 167
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (82)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (88)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (96)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE

262

<222> (106)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (111)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 499
Gly Arg Cys Leu Asp Cys Phe Asn Pro Phe Leu Leu Ser Cys Pro Arg
 1   5   10   15

Ile Gly Leu Val Glu Gln Gly Gly Val Lys Ile Glu Pro Leu Pro Lys
            20   25   30

Glu Val Lys Val Tyr Leu Leu Thr Thr Ser Ser Ala Pro Tyr Cys Met
            35   40   45

His His Ser Leu Val Glu Phe His Leu Lys Glu Leu Arg Asn Lys Asp
        50   55   60

Thr Asn Ile Glu Val Thr Phe Leu Ser Ser Asn Ile Thr Ser Ser Ser
 65   70   75   80

Lys Xaa Thr Ile Pro Lys Gln Xaa Arg Tyr Gly Glu Arg Asn His Xaa
                85   90   95

Pro Met Pro Thr Pro Gln Cys Gln Ile Xaa Gln Val Lys Phe Xaa Phe
            100   105   110

Gln Ser Ser Asn Arg Val Trp Lys Lys Asp Arg Thr Thr Ile Ile Gly
        115   120   125

Lys Phe Cys Thr Ala Leu Leu Pro Val Asn Asp Arg Glu Lys Met Val
    130   135   140

Cys Leu Pro Glu Pro Val Asn Leu Gln Ala Ser Val Thr Val Ser Cys
145   150   155   160

Asp Leu Lys Ile Ala Cys Val
                165

<210> 500
<211> 1
<212> PRT
<213> Homo sapiens

<400> 500
Met
 1

<210> 501
<211> 14
<212> PRT
<213> Homo sapiens

<400> 501
Thr Thr Glu Ile Cys Gly Thr Leu Ile Leu Arg Glu Met Ile
 1   5   10

<210> 502
<211> 67
<212> PRT
<213> Homo sapiens

<400> 502
Met Ser Leu Phe Leu Thr Leu Ala Leu Cys Ser Val Leu Leu Val His
 1   5   10   15

Leu Asn Val Leu Ala Arg Asn Cys Phe Tyr Asp Ser Gly Phe Val Val
                20   25   30

His Pro Trp Ile Trp Leu Gly His Ser Leu Pro Tyr Phe Tyr Phe Ser
            35   40   45

Pro Leu Ser Gln Arg Leu Phe Ser Tyr Leu Trp Thr Phe Ile Phe Pro
        50   55   60

Cys Arg Leu
 65

<210> 503
<211> 67
<212> PRT
<213> Homo sapiens

<400> 503
Met Ser Leu Phe Leu Thr Leu Ala Leu Cys Ser Val Leu Leu Val His
 1   5   10   15

Leu Asn Val Leu Ala Arg Asn Cys Phe Tyr Asp Ser Gly Phe Val Val
                20   25   30

His Pro Trp Ile Trp Leu Gly His Ser Leu Pro Tyr Phe Tyr Phe Ser
            35   40   45

Pro Leu Ser Gln Arg Leu Phe Ser Tyr Leu Trp Thr Phe Ile Phe Pro
        50   55   60

Cys Arg Leu
 65

<210> 504
<211> 5
<212> PRT
<213> Homo sapiens

<400> 504
Leu Tyr Leu Phe Met
 1   5

264

<210> 505
<211> 65
<212> PRT
<213> Homo sapiens

<400> 505
Ile Ile Tyr Leu Leu Phe Val Thr Lys Trp Glu Ile Arg Lys Lys Val
 1   5   10   15

Arg Lys Tyr Leu Arg Gly Lys Ser Phe Leu Leu Ser His Val Phe Ser
                20   25   30

Thr Cys Leu Pro Trp Tyr Ile Ile Asn Thr Asp Ile Leu His Thr Pro
           35   40   45

Cys Lys Ile Leu Leu Lys Leu Ser Ser Thr Trp His Val Glu Tyr Val
     50   55.   60

Pro
65

<210> 506
<211> 151.
<212> PRT
<213> Homo sapiens

<400> 506
Met Val Val Ala Ala Val Tyr Ile Leu Tyr Leu Leu Phe Leu Ile Val
 1   5   10   15

Arg Ala Cys Ser Glu Leu Arg His Met Pro Tyr Val Asp Leu Arg Leu
                20   25   30

Lys Phe Leu Thr Ala Leu Thr Phe Val Val Leu Val Ile Ser Ile Ala
           35   40   45

Ile Leu Tyr Leu Arg Phe Gly Ala Gln Val Leu Gln Asp Asn Phe Val
     50   55   60

Ala Glu Leu Ser Thr His Tyr Gln Asn Ser Ala Glu Phe Leu Ser Phe
65-   70   75   80

Tyr Gly Leu Leu Asn Phe Tyr Leu Tyr Thr Leu Ala Phe Val Tyr Ser
                85   90   95

Pro Ser Lys Asn Ala Leu Tyr Glu Ser Gln Leu Lys Asp Asn Pro Ala
                100   105   110

Phe Ser Met Leu Asn Asp Ser Asp Asp Val Ile Tyr Gly Ser Asp
           115   120   125

Tyr Glu Glu Met Pro Leu Gln Asn Gly Gln Ala Ile Arg Ala Lys Tyr
     130   135   140

Lys Glu Glu Ser Asp Ser Asp

                                    265

145   150

<210> 507
<211> 31
<212> PRT
<213> Homo sapiens

<400> 507
Leu Phe Leu Pro Phe Ser Met Val Leu Phe Cys Asp Pro Leu Asn Ser
 1   5   10   15

Lys Gly Ser Leu Ile Cys Gly Cys Phe Arg Ala Val Leu Pro Arg
            20   25   30

<210> 508
<211> 151
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (130)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 508
Met Val Val Ala Ala Val Tyr Ile Leu Tyr Leu Leu Phe Leu Ile Val
 1   5   10   15

Arg Ala Cys Ser Glu Leu Arg His Met Pro Tyr Val Asp Leu Arg Leu
            20   25   30

Lys Phe Leu Thr Ala Leu Thr Phe Val Val Leu Val Ile Ser Ile Ala
        35   40   45

Ile Leu Tyr Leu Arg Phe Gly Ala Gln Val Leu Gln Asp Asn Phe Val
     50   55   60

Ala Glu Leu Ser Thr His Tyr Gln Asn Ser Ala Glu Phe Leu Ser Phe
65   70   75   80

Tyr Gly Leu Leu Asn Phe Tyr Leu Tyr Thr Leu Ala Phe Val Tyr Ser
            85   90   95

Pro Ser Lys Asn Ala Leu Tyr Glu Ser Gln Leu Lys Asp Asn Pro Ala
            100   105   110

Phe Ser Met Leu Asn Asp Ser Asp Asp Val Ile Tyr Gly Ser Asp
        115   120   125

Tyr Xaa Glu Met Pro Leu Gln Asn Gly Gln Ala Ile Arg Ala Lys Tyr
    130   135   140

Lys Glu Glu Ser Asp Ser Asp
145   150

```
<210> 509
<211> 51
<212> PRT
<213> Homo sapiens

<400> 509
Met Arg Cys Gly Glu Ile Ile Leu Ala Ser Val Leu Gly Leu Leu Leu
1               5                   10                  15

Thr Leu Pro Pro Thr Ser Cys His Leu Asn Lys Ser Phe Pro Phe Leu
            20                  25                  30

Cys Leu Pro Trp Ser Gln Ala Leu Ser Leu Asn Pro His Ser Gly Asn
        35                  40                  45

Glu Ala Gly
    50



<210> 510
<211> 51
<212> PRT
<213> Homo sapiens

<400> 510
Met Arg Cys Gly Glu Ile Ile Leu Ala Ser Val Leu Gly Leu Leu Leu
1               5                   10                  15

Thr Leu Pro Pro Thr Ser Cys His Leu Asn Lys Ser Phe Pro Phe Leu
            20                  25                  30

Cys Leu Pro Trp Ser Gln Ala Leu Ser Leu Asn Pro His Ser Gly Asn
        35                  40                  45

Glu Ala Gly
    50



<210> 511
<211> 101
<212> PRT
<213> Homo sapiens

<400> 511
Leu Arg Asp Pro Glu Asn Cys Val Glu Cys Gly Asp Gly Glu Cys Ala
1               5                   10                  15

Cys Gly Cys Thr His Ile Gly Tyr Leu Cys Val Cys Thr Val Tyr Met
            20                  25                  30

Gln Gly Cys Val Tyr Val Cys Met Cys Ile Arg Val Trp Val Trp Val
        35                  40                  45

Trp Gly Val Phe Arg Glu Cys Ala Tyr Thr His Gly Cys Leu Gly Met
    50                  55                  60

Cys Thr Cys Leu Cys Val Arg Gly Val Cys Val Cys Val Cys Met Val
```

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```
         65                    70                    75                    80

Cys Val His Met Tyr Ala Leu Val Cys Val His Thr Trp Gly Val Cys
                 85                    90                    95

Ala Tyr Val Glu Val
                100



<210> 512
<211> 90
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (5)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 512
Met Tyr Arg Gly Xaa Arg Val Lys His Pro Phe Val Phe Arg Lys Leu
 1               5                  10                    15

Gln Val Thr Gln Asp Asp Trp Ile Val Arg Tyr Arg Gly Leu Lys Gly
                20                  25                    30

Asn Ala Glu Val Val His Arg Glu Gln Val Asn Leu Pro Arg Thr Met
          35                  40                    45

Gly Leu Arg His Ala Leu Leu Thr Arg Arg Ala Thr Arg Ser Met Gly
          50                  55                    60

Ala Ile Cys Val Ala Gly Cys Gly Ile Pro Ala Gln Val Ser Leu Ser
 65                  70                    75                    80

Lys Arg Gly Ile Leu Leu Val Pro Lys Thr
                85                    90



<210> 513
<211> 45
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (39)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 513
Leu Gly Ser Ala Arg His Arg Pro His Ala Leu Val Leu Gly Met Ser
 1               5                  10                    15

Ser Pro Phe Leu Lys Lys Thr Cys Ser Ala Val Thr Thr Thr Lys Lys
                20                  25                    30

His Gly Glu Asp Trp Ala Xaa Asp Met Met Phe Ser Ser
          35                  40                    45
```

268

<210> 514
<211> 35
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (15)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (20)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 514
Leu Thr Ser Phe Gly Leu Arg Ala Ile Leu Ile Phe Gln Met Xaa Ser
 1   5   10   15

Asp Val Asn Xaa Ile Gly Lys His Gln Arg Asn Gly Cys Lys Val Ser
            20   25   30

Gly Thr Glu
        35

<210> 515
<211> 50
<212> PRT
<213> Homo sapiens

<400> 515
Met Gly Gln Ala Ser Ala Leu Ala Ser Leu Leu Leu Arg Ala Leu Ala
 1   5   10   15

Leu Val Leu Gly Ala Arg Ile Gly Lys Gly Gly Gln Arg Gly Met Ile
            20   25   30

Ile Ile Ser Ile Ala Ala Leu Pro Ser Thr Gly Cys Gln Glu Leu Tyr
        35   40   45

Ile His
     50

<210> 516
<211> 75
<212> PRT
<213> Homo sapiens

<400> 516
Ser Pro Ile Ile Phe Pro Leu Asn His Tyr Thr Arg Ile Ser His Leu
 1   5   10   15

Cys Pro Pro Asp Ile Leu Gly Trp Ile Ile Leu Gly Leu Gly Gly Cys

269

                    20   25 ·   30

Pro Val Arg Cys Arg Thr Phe Ser Ser Ile Leu Gly Leu Phe Leu Leu
         35   40   45

Asp Ala Ser Ser Thr Pro Phe Leu Ser Tyr Asp Arg Leu Lys Cys Pro
     50   55   60

Pro Gly Lys Arg Trp Trp Gln Asn Tyr Pro Trp
65   70   75

<210> 517
<211> 60
<212> PRT
<213> Homo sapiens

<400> 517
Met Asn Glu Ser Phe Tyr Cys Ser Ala Phe Leu Pro Ala Phe Ile Val
    1   5   10   15

Cys Trp Ile Leu Ala Ile Leu Ile Val Leu Thr Cys Gly Phe Arg Met
             20   25   30

Thr Asp Tyr Ile Glu His Leu His Glu Ile Leu Cys His Leu Tyr Ile
         35   40   45

Phe Phe Gly Lys Ala Ser Ile Ser Gly Leu Ser Thr
     50   55   60

<210> 518
<211> 60
<212> PRT
<213> Homo sapiens

<400> 518
Met Asn Glu Ser Phe Tyr Cys Ser Ala Phe Leu Pro Ala Phe Ile Val
    1   5   10   15

Cys Trp Ile Leu Ala Ile Leu Ile Val Leu Thr Cys Gly Phe Arg Met
             20   25   30

Thr Asp Tyr Ile Glu His Leu His Glu Ile Leu Cys His Leu Tyr Ile
             35   40   45

Phe Phe Gly Lys Ala Ser Ile Ser Gly Leu Ser Thr
     50   55   60

<210> 519
<211> 33
<212> PRT
<213> Homo sapiens

<400> 519
Met Ala Ala Ala Trp Phe Ile Leu Leu Phe Lys His Cys Val His Ser

```
        1               5                    10                   15        .

    Ser Ser Ile Val Asp Leu Ser Phe Lys Glu Ser Ser Pro Trp Asp Ile
            .      20                        25                   30

    Lys
```

```
<210> 520
<211> 12
<212> PRT
<213> Homo sapiens

<400> 520
Ala Trp Tyr Val Ile Ile Thr Leu Val Phe Asp Gly
  1               5                   10
```

```
<210> 521
<211> 15
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (10)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (12)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 521
Ala Trp Tyr Val Val Met Ala Leu Thr Xaa Met Xaa Trp Asp Phe
  1               5                   10                   15
```

```
<210> 522
<211> 17
<212> PRT
<213> Homo sapiens

<400> 522
Leu Leu Leu Asn Phe Cys Ala Val Thr Ala Phe Phe Thr Pro Ile Leu
  1               5                   10                   15

Gln
```

```
<210> 523
<211> 33
<212> PRT
<213> Homo sapiens
```

<400> 523
Met Ala Ala Ala Trp Phe Ile Leu Leu Phe Lys His Cys Val His Ser
 1   5   10   15

Ser Ser Ile Val Asp Leu Ser Phe Lys Glu Ser Ser Pro Trp Asp Ile
            20   25   30

Lys

<210> 524
<211> 85
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (32)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 524
Leu Trp Arg Tyr Leu Gly Phe Cys Ile Leu Cys His Ile Trp Gln Lys
 1   5   10   15

Thr Phe Tyr Leu Cys Cys His Glu Lys Gly Cys Thr Met Thr Gln Xaa
            20   25   30

Pro Pro Gln Ala Ser Gly Pro Ala Glu Ala Lys Ser Glu His Arg Glu
            35   40   45

Lys Arg Arg Lys Arg Glu Asp Arg Trp Gly Lys Gln Glu Arg Arg Asp
        50   55   60

Arg Asp Val His Ile Leu Gly Cys Gln Val Trp His Ser Cys Ser Ala
 65   70   75   80

Arg Val Ala Leu Ser
                85

<210> 525
<211> 91
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (69)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 525
Met Arg Ala Cys Val Cys Val Tyr Ala Cys Ala His Met Cys Val Cys
 1   5   10   15

Leu Ala Phe Ser Tyr Leu Ile Gly Cys Ile Lys Cys Arg Pro Lys Asp
            20   25   30

```
Glu Gly Glu Asp Tyr Thr Gln Ser Leu Ala Val Thr Ala Ser Val Gln
        35                  40                  45

Lys Ser Cys Val Trp Ala Gln Asn Tyr Ser Leu His Ser Cys Asn Thr
        50                  55                  60

Tyr Ala Ser Arg Xaa Gln Arg Ala Leu Ser Pro Gly Leu His Asn Arg
65                   70                  75                      80

Arg Glu Lys Gln Leu Cys Gly Glu Leu Val Thr
                85                  90
```

```
<210> 526
<211> 96
<212> PRT
<213> Homo sapiens

<400> 526
Met Arg Ala Cys Val Cys Val Tyr Ala Cys Ala His Met Cys Val Cys
1                5                  10                  15

Leu Ala Phe Ser Tyr Leu Ile Gly Cys Ile Lys Cys Arg Pro Lys Asp
            20                  25                  30

Glu Gly Glu Asp Leu His Pro Lys Pro Gly Cys Asp Ser Phe Cys Pro
        35                  40                  45

Glu Lys Leu Cys Leu Gly Ser Glu Leu Leu Thr Thr Phe Met Gln Tyr
    50                  55                  60

Ile Cys Lys Gln Gly Ala Glu Ser Phe Ile Thr Gly Ala Thr Gln Gln
65                   70                  75                      80

Lys Gly Lys Thr Val Met Trp Arg Ala Gly Asp Leu Thr Arg Glu Ala
                85                  90                  95
```

```
<210> 527
<211> 48
<212> PRT
<213> Homo sapiens

<400> 527
Met Met Leu Tyr Gln Asn Met Leu Leu Tyr Phe Arg Ile Ile Gly Val
1                5                  10                  15

Leu Ala Leu Asn Phe Ser Ile Ser Pro Ile Phe Phe His Gly Ser Leu
            20                  25                  30

Gly Lys Leu Tyr Val Tyr Ser Ala Ala Lys Tyr Ser Leu Glu Leu Lys
        35                  40                  45
```

<210> 528
<211> 4
<212> PRT
<213> Homo sapiens

<400> 528
Met Phe Lys Met
   1

<210> 529
<211> 10
<212> PRT
<213> Homo sapiens

<400> 529
Ile Tyr Gln His Phe Ser Leu Trp Leu Gly
   1   5   10

<210> 530
<211> 48
<212> PRT
<213> Homo sapiens

<400> 530
Met Met Leu Tyr Gln Asn Met Leu Leu Tyr Phe Arg Ile Ile Gly Val
   1   5   10   15

Leu Ala Leu Asn Phe Ser Ile Ser Pro Ile Phe Phe His Gly Ser Leu
            20   25   30

Gly Lys Leu Tyr Val Tyr Ser Ala Ala Lys Tyr Ser Leu Glu Leu Lys
         35   40   45

<210> 531
<211> 22
<212> PRT
<213> Homo sapiens

<400> 531
His Ser Asp Leu Gly Leu Ser Cys Pro Glu Leu Leu Leu Pro Cys Ile
   1   5   10   15

Ile Leu Ile Thr Phe Ser
                20

<210> 532
<211> 96
<212> PRT
<213> Homo sapiens

<400> 532
Met His His His Ala His Leu Ser Cys Tyr Asp Phe Leu Met Leu Leu
 1   5   10   15

Phe Leu Leu Leu His Pro Leu Leu Pro Pro Pro Pro Thr Ala Ser Leu
                20   25   30

Pro Pro Ser Pro Leu Ile Cys Leu Phe Leu His Thr Val Pro Trp Asn
            35   40   45

Leu Ser Leu Ala Ser Ser His Ser Thr His Ser Leu Arg Ala Leu Pro
        50   55   60

Phe Thr Ser Ala Ile Val Tyr Thr Phe Thr Leu Asp His Ser Ser Glu
65   70   75   80

Ile Ser Gln Leu Leu His Pro Asp Gly Cys Ser Ala Pro Pro Pro Gly
                85   90   95

<210> 533
<211> 111
<212> PRT
<213> Homo sapiens

<400> 533
Met His His His Ala His Leu Ser Cys Tyr Asp Phe Leu Met Leu Leu
 1   5   10   15

Phe Leu Leu Leu His Pro Leu Leu Pro Pro Pro Pro Thr Ala Ser Leu
                20   25   30

Pro Pro Ser Pro Leu Ile Cys Leu Phe Leu His Thr Val Pro Trp Asn
            35   40   45

Leu Ser Leu Ala Ser Ser His Ser Thr His Ser Leu Arg Ala Leu Pro
        50   55   60

Phe Thr Ser Ala Ile Val Tyr Thr Phe Thr Leu Asp His Ser Ser Glu
65   70   75   80

Ile Ser Gln Leu Leu His Pro Asp Gly Cys Ser Ala Pro Pro Pro Gly
                85   90   95

Cys Pro Thr Gly Thr Leu Asn Pro Thr Ser Pro Lys Leu Asn Ser
            100   105   110

<210> 534
<211> 70

```
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (20)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (60)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 534
Gly Arg Lys Arg Asp Gly Gly Trp Arg Lys Gly Gln Lys Ala Gln Val
 1               5               10                  15

Glu Val Pro Xaa Leu Leu Ala Arg Arg Ile Leu Trp Pro Leu Gly Gly
            20              25              30

Trp Ser Gly Cys Val Asn Gln Ser Leu Ser Gln Trp Arg Ala Gly Leu
        35              40              45

Val Val Cys Val Phe Ile Thr Gly Pro His Pro Xaa His Thr His Thr
    50              55              60

Arg Thr His Cys Gly Val
65              70


<210> 535
<211> 70
<212> PRT
<213> Homo sapiens

<400> 535
Ala Leu Ser Ile Asn Lys Lys Gln Pro Asn Ala Trp Gly Glu Thr Val
 1               5               10                  15

Thr Lys Gly Pro Ala Phe Arg Asn Trp Asp Val Lys Gly Val Glu Asn
            20              25              30

Gly Trp Gly Val Lys Gly Glu His Val Lys Met Gln Glu Ser Ser Phe
        35              40              45

Gly Asp Ile Ala Pro Gly Gly Met Trp Val Ser Met Asn Tyr Met Lys
    50              55              60

Gly Cys Pro Ser Cys Ser
65              70


<210> 536
<211> 55
<212> PRT
<213> Homo sapiens

<400> 536
```

```
Met Val Ala Val Cys Trp Cys Leu Ala Leu Thr Ala Lys Val Ser Ala
 1               5               10              15

Ser Cys Ser Tyr Met Lys Leu Arg Pro Trp Pro Ala Asp Pro Trp Gln
            20              25              30

Cys Trp Ala Trp Thr Trp Leu Pro Gln Pro Cys Cys Pro Ala Thr Thr
        35              40              45

Gln Thr Leu Ala Trp Cys Ser
    50              55
```


```
<210> 537
<211> 40
<212> PRT
<213> Homo sapiens

<400> 537
Met Lys Cys Ser Lys Val Leu Thr Gln Leu Ile Leu Phe Thr Pro Leu
 1               5               10              15

Gly Val Cys Lys Met Ser Leu Phe Tyr Lys His Asn His Asn Ser Asn
            20              25              30

Lys Pro Gln Val Val Ala Ser Val
        35              40
```


```
<210> 538
<211> 40
<212> PRT
<213> Homo sapiens

<400> 538
Met Lys Cys Ser Lys Val Leu Thr Gln Leu Ile Leu Phe Thr Pro Leu
 1               5               10              15

Gly Val Cys Lys Met Ser Leu Phe Tyr Lys His Asn His Asn Ser Asn
            20              25              30

Lys Pro Gln Val Val Ala Ser Val
        35              40
```


```
<210> 539
<211> 195
<212> PRT
<213> Homo sapiens

<400> 539
Arg Gln Ala Val Ile Val Cys Arg Arg Arg Phe Val Met Gly Pro Val
 1               5               10              15

Arg Leu Gly Ile Leu Leu Phe Leu Phe Leu Ala Val His Glu Ala Trp
            20              25              30
```

```
Ala Gly Met Leu Lys Glu Glu Asp Asp Asp Thr Glu Arg Leu Pro Ser
        35                40                45

Lys Cys Glu Val Cys Lys Leu Leu Ser Thr Glu Leu Gln Ala Glu Leu
    50                55                60

Ser Arg Thr Gly Arg Ser Arg Glu Val Leu Glu Leu Gly Gln Val Leu
65                70                75                80

Asp Thr Gly Lys Arg Lys Arg His Val Pro Tyr Ser Val Ser Glu Thr
                85                90                95

Arg Leu Glu Glu Ala Leu Glu Asn Leu Cys Glu Arg Ile Leu Asp Tyr
            100                105                110

Ser Val His Ala Glu Arg Lys Gly Ser Leu Arg Tyr Ala Lys Gly Gln
            115                120                125

Ser Gln Thr Met Ala Thr Leu Lys Gly Leu Val Gln Lys Gly Val Lys
    130                135                140

Val Asp Leu Gly Ile Pro Leu Glu Leu Trp Asp Glu Pro Ser Val Glu
145                150                155                160

Val Thr Tyr Leu Lys Lys Gln Cys Glu Thr Met Leu Glu Arg Gly Gly
            165                170                175

Arg Gly Gly Arg Gly Arg Gly Arg Gln Asp Asp Gln Asp Arg Lys Pro
            180                185                190

Pro Gln Thr
        195
```

```
<210> 540
<211> 68
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (14)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 540
Trp Pro Thr Val Ala Ser Pro Arg Thr Ala Ser Arg Pro Xaa Gly Pro
1                5                10                15

Cys Gln Asn Cys Ala Cys Trp Thr Thr Ser Gly Ala Gly Cys Arg Pro
            20                25                30

Gly Gln Thr Ser Met Pro Pro Trp Thr Thr Gly Pro Arg Cys Cys Thr
        35                40                45

Ser Gln Pro Pro Thr Gly Ser Ala Arg Arg Leu Pro Cys Cys Trp Asn
    50                55                60

Thr Glu Pro Ala
65
```

<210> 541
<211> 201
<212> PRT
<213> Homo sapiens

<400> 541
Arg Gln Ala Val Ile Val Cys Arg Arg Arg Phe Val Met Gly Pro Val
1   5   10   15

Arg Leu Gly Ile Leu Leu Phe Leu Phe Leu Ala Val His Glu Ala Trp
            20   25   30

Ala Gly Met Leu Lys Glu Glu Asp Asp Asp Thr Glu Arg Leu Pro Ser
        35   40   45

Lys Cys Glu Val Cys Lys Leu Leu Ser Thr Glu Leu Gln Ala Glu Leu
    50   55   60

Ser Arg Thr Gly Arg Ser Arg Glu Val Leu Glu Leu Gly Gln Val Leu
65   70   75   80

Asp Thr Gly Lys Arg Lys Arg His Val Pro Tyr Ser Val Ser Glu Thr
            85   90   95

Arg Leu Glu Glu Ala Leu Glu Asn Leu Cys Glu Arg Ile Leu Asp Tyr
        100   105   110

Ser Val His Ala Glu Arg Lys Gly Ser Leu Arg Tyr Ala Lys Gly Gln
        115   120   125

Ser Gln Thr Met Ala Thr Leu Lys Gly Leu Val Gln Lys Gly Val Lys
    130   135   140

Val Asp Leu Gly Ile Pro Leu Glu Leu Trp Asp Glu Pro Ser Val Glu
145   150   155   160

Val Thr Tyr Leu Lys Lys Gln Cys Glu Thr Met Leu Glu Glu Glu Glu
            165   170   175

Glu Glu Glu Glu Glu Glu Gly Gly Asp Lys Met Thr Lys Thr Gly Ser
            180   185   190

His Pro Lys Leu Asp Arg Glu Asp Leu
        195   200

<210> 542
<211> 15
<212> PRT
<213> Homo sapiens

<400> 542
Met Pro Pro Arg Ala Ala Trp Ala Trp Leu Leu Cys Gly Ala Ser
1   5   10   15

279

```
<210> 543
<211> 15
<212> PRT
<213> Homo sapiens

<400> 543
Met Pro Pro Arg Ala Ala Trp Ala Trp Leu Leu Cys Gly Ala Ser
  1               5                  10                  15


<210> 544
<211> 116
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (7)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (16)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 544
Ser Gln Leu Leu Arg Arg Xaa Arg Gln Glu Asp Cys Leu Ser Pro Xaa
  1               5                  10                  15

Gly Gly Ser Cys Ser Glu Pro Arg Leu Arg His Cys Thr Pro Ala Trp
              20                  25                  30

Val Thr Glu Arg Asp Ser Val Ser Lys Lys Lys Lys Thr Ser Glu
          35                  40                  45

Val Gly Ala Val Pro Tyr Phe Cys Pro Thr Pro Ile Lys Arg Ile Pro
      50                  55                  60

Lys Thr Thr Cys Gly Asn Leu Ile Ile Leu Ser Asn Leu Leu Phe Gly
  65                  70                  75                  80

Gln Asp Trp His Leu Pro Cys Phe Ser Leu Leu Leu Ala Val Lys His
                  85                  90                  95

Gly Phe Lys Glu Glu Cys Phe Ser Glu Phe Thr Leu Tyr Ile Ser Asp
              100                 105                 110

Leu Glu Val Ile
          115


<210> 545
<211> 51
<212> PRT
<213> Homo sapiens

<400> 545
```

```
Met Ile Leu Ile Met Ser Met Asp Ser Val Lys Leu Val Leu Gly Trp
 1               5                  10                    15

Pro Leu Trp Val Leu Cys Phe Trp Gln Ala Ala Trp Cys Phe Lys Lys
            20                  25                  30

Ala Phe Glu Trp Gln Gln Thr Leu Pro Leu Tyr Ser Thr Glu Met Val
         35                  40                  45

Asn Lys Pro
       50
```

```
<210> 546
<211> 51
<212> PRT
<213> Homo sapiens
```

```
<400> 546
Met Ile Leu Ile Met Ser Met Asp Ser Val Lys Leu Val Leu Gly Trp
 1               5                  10                    15

Pro Leu Trp Val Leu Cys Phe Trp Gln Ala Ala Trp Cys Phe Lys Lys
            20                  25                  30

Ala Phe Glu Trp Gln Gln Thr Leu Pro Leu Tyr Ser Thr Glu Met Val
         35                  40                  45

Asn Lys Pro
       50
```

```
<210> 547
<211> 69
<212> PRT
<213> Homo sapiens
```

```
<400> 547
Met Ala Ala Ala Arg Asn Leu Arg Thr Ala Leu Ile Phe Gly Gly Phe
 1               5                  10                    15

Ile Ser Met Val Gly Ala Ala Phe Tyr Pro Ile Tyr Phe Arg Pro Leu
            20                  25                  30

Met Arg Leu Glu Glu Tyr Gln Lys Glu Gln Ala Val Asn Arg Ala Gly
         35                  40                  45

Ile Val Gln Glu Asp Val Gln Pro Pro Gly Leu Lys Val Trp Ser Asp
       50                  55                  60

Pro Phe Gly Arg Lys
 65
```

```
<210> 548
<211> 69
<212> PRT
```

<213> Homo sapiens

<400> 548
Met Ala Ala Ala Arg Asn Leu Arg Thr Ala Leu Ile Phe Gly Gly Phe
  1   5   10   15

Ile Ser Met Val Gly Ala Ala Phe Tyr Pro Ile Tyr Phe Arg Pro Leu
             20   25   30

Met Arg Leu Glu Glu Tyr Gln Lys Glu Gln Ala Val Asn Arg Ala Gly
         35   40   45

Ile Val Gln Glu Asp Val Gln Pro Pro Gly Leu Lys Val Trp Ser Asp
     50   55   60

Pro Phe Gly Arg Lys
 65

<210> 549
<211> 79
<212> PRT
<213> Homo sapiens

<400> 549
Ser Gly Trp Gln Val Pro Ser Ser Val Lys His Leu Pro Tyr Asp Asn
  1   5   10   15

Leu Arg Ser His Cys Val Ala Asp Glu Gly Glu Thr Glu Val Glu Gly
             20   25   30

Thr Arg Ala Thr Trp Val Glu His Ser Gly Arg Pro Gly Val Gly Ser
         35   40   45

Gly Arg Pro Pro Gly Thr Ser Leu Thr Thr Leu Pro Leu Leu Leu Thr
     50   55   60

His Leu Ser Leu Thr Cys Pro Leu Gly Gly Asp Phe Ser Lys Arg
 65   70   75

<210> 550
<211> 89
<212> PRT
<213> Homo sapiens

<400> 550
Met Pro Val Pro Leu Leu Ala Ser Ala Ala Trp Cys His Leu Cys Ala
  1   5   10   15

Gly Ala Leu Pro Ala Trp Leu Trp Leu Pro Trp Arg Ala Ala Ala Ala
             20   25   30

Gln Trp His Val Cys Ala Ser His Cys Leu Pro Leu His Pro Ala Phe
         35   40   45

Ser Ala Leu Gly Pro His Pro Asp Pro Gly Arg Ala Gly Pro Gly Ala
     50   55   60

```
          Ala Pro Arg Asp Cys Ala His Pro Glu Leu His Pro Leu Cys Leu Pro
          65                  70              75                  80

          Arg Trp Ser Leu Gln Leu Leu Pro Arg
                          85
```

<210> 551
<211> 21
<212> PRT
<213> Homo sapiens

<400> 551
```
          Pro Trp Ala Ser Ser His Leu Gly Pro Arg Pro Tyr Val His Gly Leu
           1           5               10                  15

          Ala Pro Ser Gly Pro
                      20
```

<210> 552
<211> 6
<212> PRT
<213> Homo sapiens

<400> 552
```
          Pro Trp Pro Pro Leu Val
           1               5
```

<210> 553
<211> 6
<212> PRT
<213> Homo sapiens

<400> 553
```
          Pro Trp Pro Pro Leu Val
           1               5
```

<210> 554
<211> 52
<212> PRT
<213> Homo sapiens

<400> 554
```
          Asp Ile Leu Asn Leu Tyr Cys Thr Phe Tyr Leu Arg Gly Ser Ser Phe
           1               5               10                  15

          Thr Cys Val Phe Ile Cys Val Tyr Leu Ser Tyr Ser Lys Arg Ser Arg
                      20              25                  30

          Glu Ser Pro Cys Pro Arg Ser Ser Ile Leu Arg Ser Glu Asp Val Gln
                      35              40                  45
```

Asn Ser Ser Arg
     50

<210> 555
<211> 39
<212> PRT
<213> Homo sapiens

<400> 555
Met Gly Gly Asn Val Leu Ile Phe His Phe Arg Cys Leu Trp Lys Cys
 1   5   10   15

Trp Gly Arg Val Arg Gly Leu Phe Leu Ser Gly Gly Pro Leu Thr Gln
            20   25   30

Ser Ile Phe Asn Ser Leu Phe
        35

<210> 556
<211> 12
<212> PRT
<213> Homo sapiens

<400> 556
Gly Gly Asn Val Leu Ile Phe His Phe Arg Cys Leu
 1   5   10

<210> 557
<211> 70
<212> PRT
<213> Homo sapiens

<400> 557
Met Ser His Cys Thr Trp Pro Leu Asp Tyr Ser Phe Leu Phe Met Ser
 1   5   10   15

Cys Ala Ser Ile Cys Gly Gln His Gly Ala Ser Val Gly Asn Thr Gly
            20   25   30

Arg Lys Gln Val Gln Ile Trp Leu Gly Leu Leu Ala Trp Gln Leu Gly
        35   40   45

Lys Pro Pro Leu Leu Trp Leu Leu Pro Arg Leu Phe Met Thr Val Ala
     50   55   60

Ala His Gln Leu Gln Leu
 65   70

<210> 558
<211> 70
<212> PRT
<213> Homo sapiens

<400> 558
Met Ser His Cys Thr Trp Pro Leu Asp Tyr Ser Phe Leu Phe Met Ser
  1   5   10   15

Cys Ala Ser Ile Cys Gly Gln His Gly Ala Ser Val Gly Asn Thr Gly
              20   25   30

Arg Lys Gln Val Gln Ile Trp Leu Gly Leu Leu Ala Trp Gln Leu Gly
          35   40   45

Lys Pro Pro Leu Leu Trp Leu Leu Pro Arg Leu Phe Met Thr Val Ala
      50   55   60

Ala His Gln Leu Gln Leu
65   70

<210> 559
<211> 62
<212> PRT
<213> Homo sapiens

<400> 559
Val Tyr Gln Arg Lys Ser Thr Val Val Leu Gly Gly Phe Leu Leu Trp
  1   5   10   15

Asp Ile Asp Phe Leu Phe Phe Phe Arg Asn Ile Val Cys Cys Asn Leu
              20   25   30

Asn Lys Asn Tyr Asp Ile Leu Arg Tyr Phe Ile Asp Lys Pro Asn Lys
          35   40   45

Asn Ile Cys Phe Tyr Phe Lys Val Asn Val Phe Leu Phe Ser
      50   55   60

<210> 560
<211> 47
<212> PRT
<213> Homo sapiens

<400> 560
Met Leu Arg Phe Ser Ser Ser Leu Leu Glu Cys Leu Leu Ser Pro Leu
  1   5   10   15

Cys Leu Thr Asp Ala Thr Gly His His Leu Asp His Pro Ile Leu Val
              20   25   30

Pro Val Gln Val Gln Lys Arg Asn Asn Val Leu Lys Phe Thr Ser
          35   40   45

<210> 561
<211> 49
<212> PRT
<213> Homo sapiens

285

```
<400> 561
Met Leu Ile Thr Ile Ser Leu Glu Leu Leu Leu Arg Leu Val Gly Ala
 1               5                  10                  15

Ala Leu Gln Glu Lys Gln Gln Pro Leu Ser Leu Pro Ser Cys Gly Glu
            20                  25                  30

Gln Gly Gly Asp Glu Arg Tyr Leu Gly Arg Pro Gly Lys Ser Leu Lys
        35                  40                  45

Asn


<210> 562
<211> 49
<212> PRT
<213> Homo sapiens

<400> 562
Met Leu Ile Thr Ile Ser Leu Glu Leu Leu Leu Arg Leu Val Gly Ala
 1               5                  10                  15

Ala Leu Gln Glu Lys Gln Gln Pro Leu Ser Leu Pro Ser Cys Gly Glu
            20                  25                  30

Gln Gly Gly Asp Glu Arg Tyr Leu Gly Arg Pro Gly Lys Ser Leu Lys
        35                  40                  45

Asn


<210> 563
<211> 47
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (25)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 563
Met Leu Ile Phe Ser Phe Leu Ser Phe Trp Phe Phe Gln Ser Cys Gln
 1               5                  10                  15

Gly Phe Ile Tyr Phe Met Ser Ile Xaa Glu Glu Pro Val Ala Asp Phe
            20                  25                  30

Val His Leu Tyr Cys Val Phe Tyr Phe Gln Gly Cys Ser Tyr Leu
        35                  40                  45


<210> 564
<211> 128
```

<212> PRT
<213> Homo sapiens

<400> 564
Phe Ser Asn Thr Trp Ser Phe Pro Lys Asp Ala Phe Tyr Thr Asp Phe
 1   5   10   15

Tyr Leu Lys Ser Ile Val Val Arg Glu Tyr Cys Val Phe Cys Ser Asn
            20   25   30

Pro Leu Lys Tyr Ile Glu Thr Cys Leu Ile Cys Lys Tyr Arg Phe Ser
            35   40   45

Tyr Phe Ser Ile Cys Asp Trp Lys Asn Ile Asn Leu Thr Ile Trp Gly
        50   55   60

Tyr Ser Ile His Thr Ile His Thr Asn Ile Tyr Val Phe Ser Val Leu
  65   70   75   80

Gln Asn Phe Tyr Ile Phe Pro Gly Ile Cys Leu Leu Ala Ser Leu Ile
                85   90   95

Thr Glu Arg Cys Thr Ile Leu Ser Cys Thr Phe Phe Cys Cys Ser Leu
            100   105   110

Ile Phe Leu Ser Tyr Pro Tyr Gly Asn Cys Ile Lys Cys Ile Pro Ile
            115   120   125

<210> 565
<211> 47
<212> PRT
<213> Homo sapiens

<400> 565
Met Leu Ile Phe Ser Phe Leu Ser Phe Trp Phe Phe Gln Ser Cys Gln
 1   5   10   15

Gly Phe Ile Tyr Phe Met Ser Ile Phe Glu Glu Pro Val Ala Asp Phe
            20   25   30

Val His Leu Tyr Cys Val Phe Tyr Phe Gln Gly Cys Ser Tyr Leu
            35   40   45

<210> 566
<211> 34
<212> PRT
<213> Homo sapiens

<400> 566
Pro Cys Ser Trp Leu Arg Ala Val Thr Leu Cys Gln Asn Leu His Trp
 1   5   10   15

Ala Cys Thr Ser Cys His Cys Asn Cys Pro Cys Gln Cys Pro Gln Leu

287

                    20   25   30

Leu Phe

<210> 567
<211> 193
<212> PRT
<213> Homo sapiens

<400> 567
Met Cys Leu Leu Phe Leu Leu Pro Arg Phe Pro Val Ser Trp Arg Ala
  1   5   10   15

Gly Val Asp Gly Ala Ala Pro Ser Ser Gln Asp Leu Trp Arg Ile Arg
             20   25   30

Ser Pro Cys Gly Asp Cys Glu Gly Phe Asp Val His Ile Met Asp Asp
         35   40   45

Met Ile Lys Arg Ala Leu Asp Phe Arg Glu Ser Arg Glu Ala Glu Pro
     50   55   60

His Pro Leu Trp Glu Tyr Pro Cys Arg Ser Leu Ser Glu Pro Trp Gln
 65   70   75   80

Ile Leu Thr Phe Asp Phe Gln Gln Pro Val Pro Leu Gln Pro Leu Cys
                 85   90   95

Ala Glu Gly Thr Val Glu Leu Arg Arg Pro Gly Gln Ser His Ala Ala
             100   105   110

Val Leu Trp Met Glu Tyr His Leu Thr Pro Glu Cys Thr Leu Ser Thr
         115   120   125

Gly Leu Leu Glu Pro Ala Asp Pro Glu Gly Gly Cys Cys Trp Asn Pro
     130   135   140

His Cys Lys Gln Ala Val Tyr Phe Phe Ser Pro Ala Pro Asp Pro Arg
145   150   155   160

Ala Leu Leu Gly Gly Pro Arg Thr Val Ser Tyr Ala Val Glu Phe His
             165   170   175

Pro Asp Thr Gly Asp Ile Ile Met Glu Phe Arg His Ala Asp Thr Pro
             180   185   190

Asp

<210> 568
<211> 138
<212> PRT
<213> Homo sapiens

<400> 568

```
Met Cys Leu Leu Phe Leu Leu Pro Arg Phe Pro Val Ser Trp Arg Ala
1               5               10              15

Gly Val Asp Gly Ala Ala Pro Ser Ser Gln Asp Leu Trp Arg Ile Arg
            20              25              30

Ser Pro Cys Gly Asp Cys Glu Gly Phe Asp Val His Ile Met Asp Asp
        35              40              45

Met Ile Lys Val Gly Arg Ala Thr Leu Cys Ile Val Pro Pro Thr Cys
    50              55              60

Ser Cys Ile Ala Gly Leu Ser Gln Gly Pro Ser Leu Gly Ser Thr Gly
    65              70              75              80

Ser Ser Val Gly Gly Ser Glu Val Arg Cys Cys His Phe Val Trp Phe
            85              90              95

Asn Met Ser Ile Ala Trp Tyr Gln Pro Cys Ser Trp Leu Arg Ala Val
            100             105             110

Thr Leu Cys Gln Asn Leu His Trp Ala Cys Thr Ser Cys His Cys Asn
        115             120             125

Cys Pro Cys Gln Cys Pro Gln Leu Leu Phe
    130             135
```

```
<210> 569
<211> 48
<212> PRT
<213> Homo sapiens

<400> 569
Met Arg Gly Asp Ala Pro Pro Ile Asn Leu Gly Cys Leu Pro Phe Phe
1               5               10              15

Leu Cys Leu Phe Phe Phe Cys His Leu Lys Tyr Tyr Leu Ser Leu Leu
            20              25              30

Gly Asn Leu Arg Pro Ile Asp Glu Val Tyr Met Cys Leu Ser Asp Ile
        35              40              45
```

```
<210> 570
<211> 17
<212> PRT
<213> Homo sapiens

<400> 570
Phe Leu Ser Leu Leu Phe Phe Phe Leu Ala Phe Ser Phe Phe Thr Glu
1               5               10              15

Ala
```

289

<210> 571
<211> 48
<212> PRT
<213> Homo sapiens

<400> 571
Met Arg Gly Asp Ala Pro Pro Ile Asn Leu Gly Cys Leu Pro Phe Phe
 1   5   10   15

Leu Cys Leu Phe Phe Phe Cys His Leu Lys Tyr Tyr Leu Ser Leu Leu
            20   25.   30

Gly Asn Leu Arg Pro Ile Asp Glu Val Tyr Met Cys Leu Ser Asp Ile
        · 35   40   45

<210> 572
<211> 184
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (153)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (178)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (181)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (182)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 572
Val Arg Met Lys Tyr Leu Phe Phe Ser Trp Leu Val Val Phe Val Gly
 1   5   10   15

Ser Trp Ile Ile Tyr Val Gln Tyr Ser Thr Tyr Thr Glu Leu Cys Arg
            20   25   30

Gly Lys Asp Cys Lys Lys Ile Ile Cys Asp Lys Tyr Lys Thr Gly Val
        35   40   45

Ile Asp Gly Pro Ala Cys Asn Ser Leu Cys Val Thr Glu Thr Leu Tyr
    50   55 .   60

290

```
Phe Gly Lys Cys Leu Ser Thr Lys Pro Asn Asn Gln Met Tyr Leu Gly
 65                  70              75                  80

Ile Trp Asp Asn Leu Pro Gly Val Val Lys Cys Gln Met Glu Gln Ala
                 85              90                  95

Leu His Leu Asp Phe Gly Thr Glu Leu Glu Pro Arg Lys Glu Ile Val
             100             105             110

Leu Phe Asp Lys Pro Thr Arg Gly Thr Thr Val Gln Lys Phe Lys Glu
         115             120             125

Met Val Tyr Ser Leu Phe Lys Ala Lys Leu Gly Asp Gln Gly Asn Leu
     130             135             140

Ser Glu Leu Val Asn Leu Ile Leu Xaa Val Ala Asp Gly Asp Lys Asp
145             150             155             160

Gly Gln Val Ser Leu Gly Glu Ala Lys Ser Ala Trp Ala Leu Leu Gln
             165             170             175

Leu Xaa Glu Phe Xaa Xaa His Gly
             180
```

```
<210> 573
<211> 3
<212> PRT
<213> Homo sapiens

<400> 573
Tyr Thr Val
 1
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<210> 574
<211> 403
<212> PRT
<213> Homo sapiens

<400> 574
Met Lys Tyr Leu Phe Phe Ser Trp Leu Val Val Phe Val Gly Ser Trp
 1               5                  10                  15

Ile Ile Tyr Val Gln Tyr Ser Thr Tyr Thr Glu Leu Cys Arg Gly Lys
             20              25                  30

Asp Cys Lys Lys Ile Ile Cys Asp Lys Tyr Lys Thr Gly Val Ile Asp
         35              40                  45

Gly Pro Ala Cys Asn Ser Leu Cys Val Thr Glu Thr Leu Tyr Phe Gly
     50              55              60

Lys Cys Leu Ser Thr Lys Pro Asn Asn Gln Met Tyr Leu Gly Ile Trp
 65              70              75                  80

Asp Asn Leu Pro Gly Val Val Lys Cys Gln Met Glu Gln Ala Leu His
```

291

                85   90   95

Leu Asp Phe Gly Thr Glu Leu Glu Pro Arg Lys Glu Ile Val Leu Phe
            100   105   110

Asp Lys Pro Thr Arg Gly Thr Thr Val Gln Lys Phe Lys Glu Met Val
            115   120   125

Tyr Ser Leu Phe Lys Ala Lys Leu Gly Asp Gln Gly Asn Leu Ser Glu
    130   135   140

Leu Val Asn Leu Ile Leu Thr Val Ala Asp Gly Asp Lys Asp Gly Gln
145   150   155   160

Val Ser Leu Gly Glu Ala Lys Ser Ala Trp Ala Leu Leu Gln Leu Asn
            165   170   175

Glu Phe Leu Leu Met Val Ile Leu Gln Asp Lys Glu His Thr Pro Lys
            180   185   190

Leu Met Gly Phe Cys Gly Asp Leu Tyr Val Met Glu Ser Val Glu Tyr
            195   200   205

Thr Ser Leu Tyr Gly Ile Ser Leu Pro Trp Val Ile Glu Leu Phe Ile
    210   215   220

Pro Ser Gly Phe Arg Arg Ser Met Asp Gln Leu Phe Thr Pro Ser Trp
225   230   235   240

Pro Arg Lys Ala Lys Ile Ala Ile Gly Leu Leu Glu Phe Val Glu Asp
            245   250   255

Val Phe His Gly Pro Tyr Gly Asn Phe Leu Met Cys Asp Thr Ser Ala
            260   265   270

Lys Asn Leu Gly Tyr Asn Asp Lys Tyr Asp Leu Lys Met Val Asp Met
    275   280   285

Arg Lys Ile Val Pro Glu Thr Asn Leu Lys Glu Leu Ile Lys Asp Arg
    290   295   300

His Cys Glu Ser Asp Leu Asp Cys Val Tyr Gly Thr Asp Cys Arg Thr
305   310   315   320

Ser Cys Asp Gln Ser Thr Met Lys Cys Thr Ser Glu Val Ile Gln Pro
            325   330   335

Asn Leu Ala Lys Ala Cys Gln Leu Leu Lys Asp Tyr Leu Leu Arg Gly
            340   345   350

Ala Pro Ser Glu Ile Arg Glu Glu Leu Glu Lys Gln Leu Tyr Ser Cys
            355   360   365

Ile Ala Leu Lys Val Thr Ala Asn Gln Met Glu Met Glu His Ser Leu
    370   375   380

Ile Leu Asn Asn Leu Lys Thr Leu Leu Trp Lys Lys Ile Ser Tyr Thr
385   390   395   400

Asn Asp Ser

                                  292

```
<210> 575
<211> 60
<212> PRT
<213> Homo sapiens

<400> 575
Met Ser Arg Phe Ser Gln Asn Phe Arg Gly Lys Glu Asp His Ile Val
 1               5                  10                  15

Phe Leu Phe Cys Phe Asn Glu Ile Phe Phe Leu Leu Leu Met Leu Leu
            20              25                  30

Val Phe Pro Trp Leu Leu Ser Lys Ala Val Ser Gly Phe Ala Glu Arg
        35                  40                  45

Leu Glu Met Thr Thr Ile Phe Arg Val Ser Arg Ser
     50                  55                  60


<210> 576
<211> 60
<212> PRT
<213> Homo sapiens

<400> 576
Met Ser Arg Phe Ser Gln Asn Phe Arg Gly Lys Glu Asp His Ile Val
 1               5                  10                  15

Phe Leu Phe Cys Phe Asn Glu Ile Phe Phe Leu Leu Leu Met Leu Leu
            20              25                  30

Val Phe Pro Trp Leu Leu Ser Lys Ala Val Ser Gly Phe Ala Glu Arg
        35                  40                  45

Leu Glu Met Thr Thr Ile Phe Arg Val Ser Arg Ser
     50                  55                  60


<210> 577
<211> 127
<212> PRT
<213> Homo sapiens

<400> 577
Met Gly Gln Val Trp Arg Val Pro Pro Leu Leu Leu Ser Val Gln Val
 1               5                  10                  15

Phe Leu Thr Met Ala His Ala Phe His Gln Ala Pro Glu Leu Gln Trp
            20              25                  30

Leu Gly Leu Trp Phe Trp Val Arg Leu Phe Ala Gly Gly Asp Gly Gly
        35                  40                  45

Leu His Leu Asn Ile Ser Ser Val Thr Leu Pro Leu Leu His Gly Lys
```

293

```
        50                      55                      60

Gln Leu Ser Arg Glu Val Pro Ser Cys Gln Gly Lys Pro Arg Leu Gly
 65                  70                  75                  80

Arg Pro Pro Tyr Lys Glu Pro Gln Asp Cys Ser His Gly Cys His Leu
                85                  90                  95

Ser Trp Lys Gly Arg Phe Met Gly Phe Pro Gly Thr Pro Arg Leu Ser
            100                 105                 110

Trp Pro Arg Gly Lys Arg Trp Leu Leu Gln Glu Phe Asp Leu Ser
        115                 120                 125


<210> 578
<211> 9
<212> PRT
<213> Homo sapiens

<400> 578
Leu Gly Lys Pro Trp Arg Tyr Pro Thr
 1               5


<210> 579
<211> 127
<212> PRT
<213> Homo sapiens

<400> 579
Met Gly Gln Val Trp Arg Val Pro Pro Leu Leu Leu Ser Val Gln Val
 1               5                  10                  15

Phe Leu Thr Met Ala His Ala Phe His Gln Ala Pro Glu Leu Gln Trp
                20                  25                  30

Leu Gly Leu Trp Phe Trp Val Arg Leu Phe Ala Gly Gly Asp Gly Gly
            35                  40                  45

Leu His Leu Asn Ile Ser Ser Val Thr Leu Pro Leu Leu His Gly Lys
        50                  55                  60

Gln Leu Ser Arg Glu Val Pro Ser Cys Gln Gly Lys Pro Arg Leu Gly
 65                  70                  75                  80

Arg Pro Pro Tyr Lys Glu Pro Gln Asp Cys Ser His Gly Cys His Leu
                85                  90                  95

Ser Trp Lys Gly Arg Phe Met Gly Phe Pro Gly Thr Pro Arg Leu Ser
            100                 105                 110

Trp Pro Arg Gly Lys Arg Trp Leu Leu Gln Glu Phe Asp Leu Ser
        115                 120                 125


<210> 580
```

294

```
<211> 61
<212> PRT
<213> Homo sapiens

<400> 580
Met Lys Ser Ala Leu His Arg Asp Ile Cys Ile Leu Met Leu Thr Ala
 1               5                  10                  15

Ala Leu Phe Thr Ile Ala Lys Thr Glu Lys Gln His Lys Cys Pro Ser
            20                  25                  30

Ile Asp Glu Gln Ile Asn Asn Leu Gln Tyr Ile Cys Thr Met Glu Tyr
        35                  40                  45

His Ser Ala Leu Gln Lys Glu Met Leu Leu Tyr Leu Gln
    50                  55                  60


<210> 581
<211> 61
<212> PRT
<213> Homo sapiens

<400> 581
Met Lys Ser Ala Leu His Arg Asp Ile Cys Ile Leu Met Leu Thr Ala
 1               5                  10                  15

Ala Leu Phe Thr Ile Ala Lys Thr Glu Lys Gln His Lys Cys Pro Ser
            20                  25                  30

Ile Asp Glu Gln Ile Asn Asn Leu Gln Tyr Ile Cys Thr Met Glu Tyr
        35                  40                  45

His Ser Ala Leu Gln Lys Glu Met Leu Leu Tyr Leu Gln
    50                  55                  60


<210> 582
<211> 61
<212> PRT
<213> Homo sapiens

<400> 582
Met Lys Ser Ala Leu His Arg Asp Ile Cys Ile Leu Met Leu Thr Ala
 1               5                  10                  15

Ala Leu Phe Thr Ile Ala Lys Thr Glu Lys Gln His Lys Cys Pro Ser
            20                  25                  30

Ile Asp Glu Gln Ile Asn Asn Leu Gln Tyr Ile Cys Thr Met Glu Tyr
        35                  40                  45

His Ser Ala Leu Gln Lys Glu Met Leu Leu Tyr Leu Gln
    50                  55                  60


<210> 583
```

```
<211> 41
<212> PRT
<213> Homo sapiens

<400> 583
Met Leu Val Ser Met Cys Met Gly Leu Leu Phe Leu Gln Val Gly Lys
  1               5                   10                  15

Gln Cys Ile Ala Phe Phe Tyr Thr Glu Ser Thr Arg Arg Pro Lys His
             20                  25                  30

Leu Lys Thr Met Gly Ser Gly Tyr Ala
         35                  40


<210> 584
<211> 41
<212> PRT
<213> Homo sapiens

<400> 584
Met Leu Val Ser Met Cys Met Gly Leu Leu Phe Leu Gln Val Gly Lys
  1               5                   10                  15

Gln Cys Ile Ala Phe Phe Tyr Thr Glu Ser Thr Arg Arg Pro Lys His
             20                  25                  30

Leu Lys Thr Met Gly Ser Gly Tyr Ala
         35                  40


<210> 585
<211> 241
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (58)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 585
Met Phe Lys Leu Arg Gln Met Arg Val Glu Lys Phe Ile Tyr Glu Asn
  1               5                   10                  15

His Pro Asp Val Phe Ser Asp Ser Ser Met Asp His Phe Gln Lys Phe
             20                  25                  30

Leu Pro Thr Val Gly Gly Gln Leu Gly Thr Ala Gly Gln Gly Phe Ser
         35                  40                  45

Tyr Ser Lys Ser Asn Gly Arg Gly Gly Xaa Gln Ala Gly Gly Ser Gly
     50                  55                  60

Ser Ala Gly Gln Tyr Gly Ser Asp Gln Gln His His Leu Gly Ser Gly
 65                  70                  75                  80

Ser Gly Ala Gly Gly Thr Gly Gly Pro Ala Gly Gln Ala Gly Arg Gly
```

```
                     85                90                95
Gly Ala Ala Gly Thr Ala Gly Val Gly Glu Thr Gly Ser Gly Asp Gln
            100                105                110

Ala Gly Gly Glu Gly Lys His Ile Thr Val Phe Lys Thr Tyr Ile Ser
        115                120                125

Pro Trp Glu Arg Ala Met Gly Val Asp Pro Gln Gln Lys Met Glu Leu
    130                135                140

Gly Ile Asp Leu Leu Ala Tyr Gly Ala Lys Ala Glu Leu Pro Lys Tyr
145                150                155                160

Lys Ser Phe Asn Arg Thr Ala Met Pro Tyr Gly Gly Tyr Glu Lys Ala
            165                170                175

Ser Lys Arg Met Thr Phe Gln Met Pro Lys Phe Asp Leu Gly Pro Leu
            180                185                190

Leu Ser Glu Pro Leu Val Leu Tyr Asn Gln Asn Leu Ser Asn Arg Pro
        195                200                205

Ser Phe Asn Arg Thr Pro Ile Pro Trp Leu Ser Ser Gly Glu Pro Val
    210                215                220

Asp Tyr Asn Val Asp Ile Gly Ile Pro Leu Asp Gly Glu Thr Glu Glu
225                230                235                240

Leu
```

```
<210> 586
<211> 241
<212> PRT
<213> Homo sapiens

<400> 586
Met Phe Lys Leu Arg Gln Met Arg Val Glu Lys Phe Ile Tyr Glu Asn
1                5                10                15

His Pro Asp Val Phe Ser Asp Ser Ser Met Asp His Phe Gln Lys Phe
            20                25                30

Leu Pro Thr Val Gly Gly Gln Leu Gly Thr Ala Gly Gln Gly Phe Ser
        35                40                45

Tyr Ser Lys Ser Asn Gly Arg Gly Gly Ser Gln Ala Gly Gly Ser Gly
    50                55                60

Ser Ala Gly Gln Tyr Gly Ser Asp Gln Gln His His Leu Gly Ser Gly
65                70                75                80

Ser Gly Ala Gly Gly Thr Gly Gly Pro Ala Gly Gln Ala Gly Arg Gly
            85                90                95

Gly Ala Ala Gly Thr Ala Gly Val Gly Glu Thr Gly Ser Gly Asp Gln
        100                105                110
```

```
Ala Gly Gly Glu Gly Lys His Ile Thr Val Phe Lys Thr Tyr Ile Ser
        115                 120                 125

Pro Trp Glu Arg Ala Met Gly Val Asp Pro Gln Gln Lys Met Glu Leu
        130                 135                 140

Gly Ile Asp Leu Leu Ala Tyr Gly Ala Lys Ala Glu Leu Pro Lys Tyr
145                     150                 155                 160

Lys Ser Phe Asn Arg Thr Ala Met Pro Tyr Gly Gly Tyr Glu Lys Ala
                165                 170                 175

Ser Lys Arg Met Thr Phe Gln Met Pro Lys Phe Asp Leu Gly Pro Leu
            180                 185                 190

Leu Ser Glu Pro Leu Val Leu Tyr Asn Gln Asn Leu Ser Asn Arg Pro
        195                 200                 205

Ser Phe Asn Arg Thr Pro Ile Pro Trp Leu Ser Ser Gly Glu Pro Val
        210                 215                 220

Asp Tyr Asn Val Asp Ile Gly Ile Pro Leu Asp Gly Glu Thr Glu Glu
225                     230                 235                 240

Leu
```

```
<210> 587
<211> 17
<212> PRT
<213> Homo sapiens

<400> 587
Arg Phe Pro Ile Ser Pro His Pro Tyr Gln His Ala Phe Leu Phe Phe
  1               5                   10                  15

Phe
```

```
<210> 588
<211> 39
<212> PRT
<213> Homo sapiens

<400> 588
Leu Arg Val Ala Val Gly Leu Cys Pro Arg Asp Ala Leu Leu Leu Ser
  1               5                   10                  15

Pro Pro Arg Val Val Val Cys Gly Val Thr Asp Val Val Val Asp Lys
            20                  25                  30

Gly Val Gly Leu Leu Val Val
            35
```

<210> 589
<211> 23
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (5)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 589
Met Arg Val Thr Xaa Ser Ser His Pro Cys Gln Arg Leu Val Leu Gln
1   5   10   15

Cys Ser Gly Phe Trp Leu Phe
            20

<210> 590
<211> 27
<212> PRT
<213> Homo sapiens

<400> 590
Met Arg Val Thr Val Ser Ser His Pro Cys Gln Arg Leu Val Leu Ser
1   5   10   15

Val Phe Trp Leu Leu Ala Ile Leu Ile Gly Val
            20   25

<210> 591
<211> 55
<212> PRT
<213> Homo sapiens

<400> 591
Met Glu Ser Ser Thr Gly Lys Ala Ser Pro Arg Cys His Ile His Cys
1   5   10   15

Val Pro Pro Phe Pro Pro Pro Cys Pro Val Lys Arg Val Gly Arg Leu
            20   25   30

Phe Leu Phe Phe Gln His Phe Pro Gln Gly Thr Val Ile Ile Pro Leu
        35   40   45

Met Pro Ser Pro Pro Leu Asp
        50   55

<210> 592
<211> 314
<212> PRT
<213> Homo sapiens

<220>

299

<221> SITE
<222> (129)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 592
Tyr Ser Lys Thr His Ser Ile Lys Ser Ala Gln Pro Gly Val Pro Thr
 1   5   10   15

Ser Ala Arg Ser Pro Arg Gln Pro Ser Pro Gly Pro Thr Pro Pro Pro
             20   25   30

Phe Pro Gly Asn Arg Gly Thr Ala Leu Gly Gly Gly Ser Ile Arg Gln
         35   40   45

Ser Pro Leu Ser Ser Ser Ser Pro Phe Ser Asn Arg Pro Pro Leu Pro
     50   55   60

Pro Thr Pro Ser Arg Ala Leu Asp Asp Lys Pro Pro Pro Pro Pro Pro
 65   70   75   80

Pro Val Gly Asn Arg Pro Ser Ile His Arg Glu Ala Val Pro Pro Pro
             85   90   95

Pro Pro Gln Asn Asn Lys Pro Pro Val Pro Ser Thr Pro Arg Pro Ser
         100   105   110

Ala Ala Ser Gln Ala Pro Pro Pro Pro Pro Pro Ser Arg Pro Gly
         115   120   125

Xaa Pro Pro Leu Pro Pro Ser Ser Ser Gly Asn Asp Glu Thr Pro Arg
    130   135   140

Leu Pro Gln Arg Asn Leu Ser Leu Ser Ser Ser Thr Pro Pro Leu Pro
145   150   155   160

Ser Pro Gly Arg Ser Gly Pro Leu Pro Pro Pro Pro Ser Glu Arg Pro
             165   170   175

Pro Pro Pro Val Arg Asp Pro Pro Gly Arg Ser Gly Pro Leu Pro Pro
         180   185   190

Pro Pro Pro Val Ser Arg Asn Gly Ser Thr Ser Arg Ala Leu Pro Ala
         195   200   205

Thr Pro Gln Leu Pro Ser Arg Ser Gly Val Asp Ser Pro Arg Ser Gly
    210   215   220

Pro Arg Pro Pro Leu Pro Pro Asp Arg Pro Ser Ala Gly Ala Pro Pro
225   230   235   240

Pro Pro Pro Pro Ser Thr Ser Ile Arg Asn Gly Phe Gln Asp Ser Pro
             245   250   255

Cys Glu Asp Glu Trp Glu Ser Arg Phe Tyr Phe His Pro Ile Ser Asp
         260   265   270

Leu Pro Pro Pro Glu Pro Tyr Val Gln Thr Thr Lys Ser Tyr Pro Ser
     275   280   285

Lys Leu Ala Arg Asn Glu Ser Arg Ser Gly Ser Asn Arg Arg Glu Arg
                                300

```
            290                    295                    300

Gly Ala Pro Pro Leu Pro Pro Ile Pro Arg
305                    310
```

<210> 593
<211> 55
<212> PRT
<213> Homo sapiens

<400> 593
```
Met Glu Ser Ser Thr Gly Lys Ala Ser Pro Arg Cys His Ile His Cys
 1               5                  10                  15

Val Pro Pro Phe Pro Pro Pro Cys Pro Val Lys Arg Val Gly Arg Leu
            20                  25                  30

Phe Leu Phe Phe Gln His Phe Pro Gln Gly Thr Val Ile Ile Pro Leu
        35                  40                  45

Met Pro Ser Pro Pro Leu Asp
     50                  55
```

<210> 594
<211> 53
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (23)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 594
```
Phe Ile Ile His Ser Ile Ser Pro Val Ala Leu Asn Pro Gln Ala His
 1               5                  10                  15

Asp Leu Pro Phe Ser Leu Xaa Ser Cys Val Ser Val Phe Asn Leu Arg
            20                  25                  30

Ser Phe Pro Thr Met Asp Ser Cys Thr Thr Leu Asn Glu Thr Ser Ile
        35                  40                  45

Phe Gln Arg Arg Val
     50
```

<210> 595
<211> 261
<212> PRT
<213> Homo sapiens

<400> 595
```
Gly Ile Phe Arg Ser Leu Arg Val Leu Phe Pro Leu Phe Ser Val Gly
 1               5                  10                  15
```

Arg Pro Gln Phe Ala Arg Ser Leu Ser Ala Ala Pro Gln Leu Ser Asp
            20   25   30

Thr Ala Asp Thr Met Gly Phe Gly Asp Leu Lys Ser Pro Ala Gly Leu
            35   40   45

Gln Val Leu Asn Asp Tyr Leu Ala Asp Lys Ser Tyr Ile Glu Gly Tyr
        50   55   60

Val Pro Ser Gln Ala Asp Val Ala Val Phe Glu Ala Val Ser Ser Pro
65   70   75   80

Pro Pro Ala Asp Leu Cys His Ala Leu Arg Trp Tyr Asn His Ile Lys
                85   90   95

Ser Tyr Glu Lys Glu Lys Ala Ser Leu Pro Gly Val Lys Lys Ala Leu
            100   105   110

Gly Lys Tyr Gly Pro Ala Asp Val Glu Asp Thr Thr Gly Ser Gly Ala
        115   120   125

Thr Asp Ser Lys Asp Asp Asp Ile Asp Leu Phe Gly Ser Asp Asp
    130   135   140

Glu Glu Glu Ser Glu Glu Ala Lys Arg Leu Arg Glu Glu Arg Leu Ala
145   150   155   160

Gln Tyr Glu Ser Lys Lys Ala Lys Lys Pro Ala Leu Val Ala Lys Ser
            165   170   175

Ser Ile Leu Leu Asp Val Lys Pro Trp Asp Asp Glu Thr Asp Met Ala
            180   185   190

Lys Leu Glu Glu Cys Val Arg Ser Ile Gln Ala Asp Gly Leu Val Trp
        195   200   205

Gly Ser Ser Lys Leu Val Pro Val Gly Tyr Gly Ile Lys Lys Leu Gln
    210   215   220

Ile Gln Cys Val Val Glu Asp Asp Lys Val Gly Thr Asp Met Leu Glu
225   230   235   240

Glu Gln Ile Thr Ala Phe Glu Asp Tyr Val Gln Ser Met Asp Val Ala
            245   250   255

Ala Phe Asn Lys Ile
            260

<210> 596
<211> 44
<212> PRT
<213> Homo sapiens

<400> 596
Met Lys Lys Glu Met Val Leu Leu Thr Thr Thr Tyr Phe Ser Leu His
1   5   10   15

302

Val Lys Val Phe Phe Cys Leu Phe Val Cys Phe Ser Ile Leu Ser Ser
          20   25   30

Ser Arg Arg Gly Ser Leu Ala Asn Asn Ser Ser Trp
      35   40

<210> 597
<211> 44
<212> PRT
<213> Homo sapiens

<400> 597
Met Lys Lys Glu Met Val Leu Leu Thr Thr Thr Tyr Phe Ser Leu His
 1   5   10   15

Val Lys Val Phe Phe Cys Leu Phe Val Cys Phe Ser Ile Leu Ser Ser
          20   25   30

Ser Arg Arg Gly Ser Leu Ala Asn Asn Ser Ser Trp
      35   40

<210> 598
<211> 42
<212> PRT
<213> Homo sapiens

<400> 598
Met Phe Thr Leu Leu Leu Ser Ser Phe Phe Leu Gln His Cys Leu Gln
 1   5   10   15

Asn Asn Leu Tyr Ala Ser Glu Arg Glu Gln Ile Phe Ser Asn Phe Leu
          20   25   30

Gln Leu Ser Ser Leu Lys Arg Arg Ile Cys
      35   40

<210> 599
<211> 6.
<212> PRT
<213> Homo sapiens

<400> 599
Leu Leu Leu Ser Ser Phe
 1   5

<210> 600
<211> 42
<212> PRT
<213> Homo sapiens

<400> 600
Met Phe Thr Leu Leu Leu Ser Ser Phe Phe Leu Gln His Cys Leu Gln

```
        1 ·                5                    10                    15
```

```
Asn Asn Leu Tyr Ala Ser Glu Arg Glu Gln Ile Phe Ser Asn Phe Leu
            20                  25                  30
```

```
Gln Leu Ser Ser Leu Lys Arg Arg Ile Cys  .
        35                  40
```

```
<210> 601
<211> 86
<212> PRT
<213> Homo sapiens
```

```
<220>
<221> SITE
<222> (6)
<223> Xaa equals any of the naturally occurring L-amino acids
```

```
<220>
<221> SITE
<222> (21)
<223> Xaa equals any of the naturally occurring L-amino acids
```

```
<220>
<221> SITE
<222> (31)
<223> Xaa equals any of the naturally occurring L-amino acids
```

```
<220>
<221> SITE
<222> (76)
<223> Xaa equals any of the naturally occurring L-amino acids
```

```
<400> 601
Leu Gly Ser Pro Glu Xaa Ala Gln Lys Val Asp Ile Thr Ser Ala His
  1                5                  10                  15
```

```
Phe Ile Gly Gln Xaa Ser Arg Pro Ser Asp Phe Ala Gln Val Xaa Ser
            20                  25                  30
```

```
Leu Glu Gly Ser Arg Pro Val Ile Trp Ser Leu Asn Gly Trp Thr Leu
        35                  40                  45
```

```
Lys Glu Thr Pro Arg Ala Asp Gly Val Phe Thr Glu Thr Ala Gly Gln
    50                  55                  60
```

```
Gly Leu Gly Thr Ala Gln Gly His Leu Leu Trp Xaa Ala Ala Ala Thr
 65                  70                  75                  80
```

```
Gly Ser Pro Asp Cys Ser
                85
```

```
<210> 602
<211> 44
<212> PRT
<213> Homo sapiens
```

<400> 602
Met Gly Val Ala Leu Pro Ser Pro Leu Leu Cys Ser Leu Pro Leu Phe
 1   5   10   15

Leu Leu Phe Gly Asp Val Ser Gly Ser Ser Ser Leu Leu Ala Leu Leu
            20   25   30

Pro Phe Leu His Pro Trp His His Pro Ser Leu Ser
        35   40

<210> 603
<211> 44
<212> PRT
<213> Homo sapiens

<400> 603
Met Gly Val Ala Leu Pro Ser Pro Leu Leu Cys Ser Leu Pro Leu Phe
 1   5   10   15

Leu Leu Phe Gly Asp Val Ser Gly Ser Ser Ser Leu Leu Ala Leu Leu
            20   25   30

Pro Phe Leu His Pro Trp His His Pro Ser Leu Ser
        35   40

<210> 604
<211> 60
<212> PRT
<213> Homo sapiens

<400> 604
Met Leu Ser Ala Val Leu Thr Met Leu Arg Phe Ile Ile Ala Phe Ser
 1   5   10   15

Leu Leu Phe Cys Ser Cys Ser Thr Asp Lys His Cys Thr Trp Tyr His
            20   25   30

Ala Leu Pro His Phe Lys Lys Ile Cys Leu Thr Glu Arg Lys Lys Met
        35   40   45

Trp Phe Gly Leu Ala Ala Val Leu Ile Tyr Gly Ile
    50   55   60

<210> 605
<211> 17
<212> PRT
<213> Homo sapiens

<400> 605
Ile Thr Phe Ser Cys Phe Phe Cys Asn Asn Cys Ser Gln Val Asn Leu
 1   5   10   15

Gln

                                305

<210> 606
<211> 60
<212> PRT
<213> Homo sapiens

<400> 606
Met Leu Ser Ala Val Leu Thr Met Leu Arg Phe Ile Ile Ala Phe Ser
  1   5   10   15

Leu Leu Phe Cys Ser Cys Ser Thr Asp Lys His Cys Thr Trp Tyr His
             20   25   30

Ala Leu Pro His Phe Lys Lys Ile Cys Leu Thr Glu Arg Lys Lys Met
         35   40   45

Trp Phe Gly Leu Ala Ala Val Leu Ile Tyr Gly Ile
     50   55   60

<210> 607
<211> 97
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (87)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (92)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 607
Leu Gly Ala Glu His Phe Lys Cys Ile Thr Trp Val Ala Gly Trp Ala
  1   5   10   15

Val Pro Gly Leu Lys Gly Val Gly Ser Phe Phe Gln Gly Ala Pro Ser
             20   25   30

Ala Ser Trp His Arg Thr Leu Ala Pro Ala His Pro Lys Leu Thr Leu
             35   40   45

Val Gly Val Gly Pro Leu Thr Gln Thr Trp Pro Leu Pro Ser Leu Val
     50   55   60

Leu Leu Pro Gln Leu Ser Pro Val Cys Gly Arg Val Cys Leu Asp Arg
 65   70   75   80

Leu Trp Ala Gly Gln Gly Xaa Gly Gln Ala Glu Xaa Glu Phe Val Leu
             85   90   95

Gly

```
<210> 608
<211> 318
<212> PRT
<213> Homo sapiens

<400> 608
Met Arg Leu Leu Ala Gly Trp Leu Cys Leu Ser Leu Ala Ser Val Trp
 1               5                  10                  15

Leu Ala Arg Arg Met Trp Thr Leu Arg Ser Pro Leu Thr Arg Ser Leu
            20                  25                  30

Tyr Val Asn Met Thr Ser Gly Pro Gly Gly Pro Ala Ala Ala Ala Gly
        35                  40                  45

Gly Arg Lys Glu Asn His Gln Trp Tyr Val Cys Asn Arg Glu Lys Leu
    50                  55                  60

Cys Glu Ser Leu Gln Ala Val Phe Val Gln Ser Tyr Leu Asp Gln Gly
65                  70                  75                  80

Thr Gln Ile Phe Leu Asn Asn Ser Ile Glu Lys Ser Gly Trp Leu Phe
                85                  90                  95

Ile Gln Leu Tyr His Ser Phe Val Ser Ser Val Phe Ser Leu Phe Met
            100                 105                 110

Ser Arg Thr Ser Ile Asn Gly Leu Leu Gly Arg Gly Ser Met Phe Val
        115                 120                 125

Phe Ser Pro Asp Gln Phe Gln Arg Leu Leu Lys Ile Asn Pro Asp Trp
    130                 135                 140

Lys Thr His Arg Leu Leu Asp Leu Gly Ala Gly Asp Gly Glu Val Thr
145                 150                 155                 160

Lys Ile Met Ser Pro His Phe Glu Glu Ile Tyr Ala Thr Glu Leu Ser
                165                 170                 175

Glu Thr Met Ile Trp Gln Leu Gln Lys Lys Lys Tyr Arg Val Leu Gly
            180                 185                 190

Ile Asn Glu Trp Gln Asn Thr Gly Phe Gln Tyr Asp Val Ile Ser Cys
        195                 200                 205

Leu Asn Leu Leu Asp Arg Cys Asp Gln Pro Leu Thr Leu Leu Lys Asp
    210                 215                 220

Ile Arg Ser Val Leu Glu Pro Thr Arg Gly Arg Val Ile Leu Ala Leu
225                 230                 235                 240

Val Leu Pro Phe His Pro Tyr Val Glu Asn Val Gly Gly Lys Trp Glu
                245                 250                 255

Lys Pro Ser Glu Ile Leu Glu Ile Lys Gly Gln Asn Trp Glu Glu Gln
            260                 265                 270
```

307

Val Asn Ser Leu Pro Glu Val Phe Arg Lys Ala Gly Phe Val Ile Glu
        275   280   285

Ala Phe Thr Arg Leu Pro Tyr Leu Cys Glu Gly Asp Met Tyr Asn Asp
        290   295   300

Tyr Tyr Val Leu Asp Asp Ala Val Phe Val Leu Lys Pro Val
305   310   315

<210> 609
<211> 318
<212> PRT
<213> Homo sapiens

<400> 609
Met Arg Leu Leu Ala Gly Trp Leu Cys Leu Ser Leu Ala Ser Val Trp
  1   5   10   15

Leu Ala Arg Arg Met Trp Thr Leu Arg Ser Pro Leu Thr Arg Ser Leu
                20   25   30

Tyr Val Asn Met Thr Ser Gly Pro Gly Gly Pro Ala Ala Ala Ala Gly
        35   40   45

Gly Arg Lys Glu Asn His Gln Trp Tyr Val Cys Asn Arg Glu Lys Leu
        50   55   60

Cys Glu Ser Leu Gln Ala Val Phe Val Gln Ser Tyr Leu Asp Gln Gly
 65   70   75   80

Thr Gln Ile Phe Leu Asn Asn Ser Ile Glu Lys Ser Gly Trp Leu Phe
                85   90   95

Ile Gln Leu Tyr His Ser Phe Val Ser Ser Val Phe Ser Leu Phe Met
            100   105   110

Ser Arg Thr Ser Ile Asn Gly Leu Leu Gly Arg Gly Ser Met Phe Val
        115   120   125

Phe Ser Pro Asp Gln Phe Gln Arg Leu Leu Lys Ile Asn Pro Asp Trp
    130   135   140

Lys Thr His Arg Leu Leu Asp Leu Gly Ala Gly Asp Gly Glu Val Thr
145   150   155   160

Lys Ile Met Ser Pro His Phe Glu Glu Ile Tyr Ala Thr Glu Leu Ser
                165   170   175

Glu Thr Met Ile Trp Gln Leu Gln Lys Lys Lys Tyr Arg Val Leu Gly
            180   185   190

Ile Asn Glu Trp Gln Asn Thr Gly Phe Gln Tyr Asp Val Ile Ser Cys
        195   200   205

Leu Asn Leu Leu Asp Arg Cys Asp Gln Pro Leu Thr Leu Leu Lys Asp
    210   215   220

Ile Arg Ser Val Leu Glu Pro Thr Arg Gly Arg Val Ile Leu Ala Leu

```
.225                    230                  235                  240
```

Val Leu Pro Phe His Pro Tyr Val Glu Asn Val Gly Gly Lys Trp Glu
            245   250   255

Lys Pro Ser Glu Ile Leu Glu Ile Lys Gly Gln Asn Trp Glu Glu Gln
            260   265   270

Val Asn Ser Leu Pro Glu Val Phe Arg Lys Ala Gly Phe Val Ile Glu
            275   280   285

Ala Phe Thr Arg Leu Pro Tyr Leu Cys Glu Gly Asp Met Tyr Asn Ala
    290   295   300

Tyr Tyr Val Leu Asp Asp Ala Val Phe Val Leu Lys Pro Val
305   310   315

<210> 610
<211> 195
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (159)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (175)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 610
Met Trp Thr Leu Phe Ala Leu Ser Gly Pro Leu Phe Leu Phe Gln Val
    1   5   10   15

Leu Thr Phe Met Ile Tyr Ile Val Ser Thr Val Phe Cys Gly His Leu
                20   25   30

Gly Lys Val Glu Leu Ala Ser Val Thr Leu Ala Val Ala Phe Val Asn
            35   40   45

Val Cys Gly Val Ser Val Gly Val Gly Leu Ser Ser Ala Cys Asp Thr
    50   55   60

Leu Met Ser Gln Ser Phe Gly Ser Pro Asn Lys Lys His Val Gly Val
 65   70   75   80

Ile Leu Gln Arg Gly Ala Leu Val Leu Leu Leu Cys Cys Leu Pro Cys
                85   90   95

Trp Ala Leu Phe Leu Asn Thr Gln His Ile Leu Leu Leu Phe Arg Gln
                100   105   110

Asp Pro Asp Val Ser Arg Leu Thr Gln Asp Tyr Val Met Ile Phe Ile
            115   120   125

Pro Gly Leu Pro Val Ile Phe Leu Tyr Asn Leu Leu Ala Lys Tyr Leu

309

```
            130                   135                   140

Gln Asn Gln Val Gln Val Phe Ser Val Trp Gly Gly Pro Ser Xaa Ser
145                 150                 155                 160

Thr Leu Pro Tyr Ser Ser Gly Arg Gly Ala Trp Gly Phe Pro Xaa Leu
                165                 170                 175

Ser Thr Ile Cys Glu Pro Ala Leu Glu Arg Gly Ser Leu Pro Thr His
                180                 185                 190

Leu Pro Tyr
        195


<210> 611
<211> 37
<212> PRT
<213> Homo sapiens

<400> 611
Leu Ala Gly Pro Val Phe Ile Tyr Phe Arg Arg Ser Pro Gly Pro Lys
    1               5                10                  15

Ser Ser Val Val Trp Trp Ala Thr Val Ser Thr Val Trp Pro Thr Met
                20                  25                  30

Pro Trp Phe Leu Cys
            35


<210> 612
<211> 3
<212> PRT
<213> Homo sapiens

<400> 612
Ile Pro Gly
    1


<210> 613
<211> 180
<212> PRT
<213> Homo sapiens

<400> 613
Met Trp Thr Leu Phe Ala Leu Ser Gly Pro Leu Phe Leu Phe Gln Val
    1               5                10                  15

Leu Thr Phe Met Ile Tyr Ile Val Ser Thr Val Phe Cys Gly His Leu
                20                  25                  30

Gly Lys Val Glu Leu Ala Ser Val Thr Leu Ala Val Ala Phe Val Asn
            35                  40                  45

Val Cys Gly Val Ser Val Gly Val Gly Leu Ser Ser Ala Cys Asp Thr
```

```
          50                      55                        60

Leu Met Ser Gln Ser Phe Gly Ser Pro Asn Lys Lys His Val Gly Val
 65                  70                  75                  80

Ile Leu Gln Arg Gly Ala Leu Val Leu Leu Cys Cys Leu Pro Cys
                 85                  90                  95

Trp Ala Leu Phe Leu Asn Thr Gln His Ile Leu Leu Leu Phe Arg Gln
             100                 105                 110

Asp Pro Asp Val Ser Arg Leu Thr Gln Asp Tyr Val Met Ile Phe Ile
         115                 120                 125

Pro Gly Leu Pro Val Ile Phe Leu Tyr Asn Leu Leu Ala Lys Tyr Leu
     130                 135                 140

Gln Asn Gln Val Gln Val Phe Glu Cys Val Gly Arg Pro Phe Ser Gln
145                 150                 155                 160

His Thr Ala Leu Phe Gln Trp Glu Gly Gly Leu Gly Leu Ser Pro Ser
                 165                 170                 175

Leu His His Leu
             180
```

```
<210> 614
<211> 38
<212> PRT
<213> Homo sapiens

<400> 614
Glu Lys Lys Lys Lys Lys Lys Arg Pro Gly Ala Val Ala His Ala
  1                 5                  10                 15

Leu Ile Pro Ala Leu Trp Glu Thr Glu Ala Gly Gly Ser Pro Glu Val
             20                  25                  30

Gly Ser Ser Arg Pro Ala
         35
```

```
<210> 615
<211> 18
<212> PRT
<213> Homo sapiens

<400> 615
Met Val Arg Thr Leu Ser Leu Ala Val Leu Ser Trp Leu Pro Ala Ala
  1                 5                  10                 15

Val Cys
```

```
<210> 616
```

311

```
<211> 18
<212> PRT
<213> Homo sapiens

<400> 616
Met Val Arg Thr Leu Ser Leu Ala Val Leu Ser Trp Leu Pro Ala Ala
  1               5                  10                  15

Val Cys




<210> 617
<211> 42
<212> PRT
<213> Homo sapiens

<400> 617
Met Leu Leu Ser Trp Thr Val Leu Ile Ile Ile Leu Pro Phe Ala Gly
  1               5                  10                  15

Asp Val Ser Ser His Leu Cys Ile Leu Arg Pro Phe Ala Gly Ser Val
             20                  25                  30

Ser Ser Cys Leu Ser Asn Phe Lys Arg Ile
         35                  40




<210> 618
<211> 42
<212> PRT
<213> Homo sapiens

<400> 618
Met Leu Leu Ser Trp Thr Val Leu Ile Ile Ile Leu Pro Phe Ala Gly
  1               5                  10                  15

Asp Val Ser Ser His Leu Cys Ile Leu Arg Pro Phe Ala Gly Ser Val
             20                  25                  30

Ser Ser Cys Leu Ser Asn Phe Lys Arg Ile
         35                  40




<210> 619
<211> 93
<212> PRT
<213> Homo sapiens

<400> 619
Ser Ala Ser Cys Trp Asn Ala Asn Phe Leu Pro Arg Asn Gln Gly Arg
  1               5                  10                  15

Lys Leu His Cys Cys Ala Lys Lys Lys Lys Pro Ser Leu His Thr
             20                  25                  30

Leu Lys Pro Phe Leu Asn Pro Ser Arg Glu Ser Thr Val Ala Ser Ser
```

312

```
                35                  40                  45
Thr Thr Ala Ile Gly Phe Ala Ser Val Met Cys Ser Tyr Leu Leu Asp
    50                  55                  60

Phe Gln Asn Ile Lys Lys Lys Lys Arg Ala Ala Ala Leu Glu Asp Pro
65                  70                  75                  80

Ser Leu Arg Thr Arg Ala Cys Asp Asn Ile Ala Arg Arg
                85                  90
```

```
<210> 620
<211> 403
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (175)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (320)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (331)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (368)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 620
Met Ala Thr Ala Glu Arg Arg Ala Leu Gly Ile Gly Phe Gln Trp Leu
 1               5                  10                  15

Ser Leu Ala Thr Leu Val Leu Ile Cys Ala Gly Gln Gly Gly Arg Arg
            20                  25                  30

Glu Asp Gly Gly Pro Ala Cys Tyr Gly Gly Phe Asp Leu Tyr Phe Ile
        35                  40                  45

Leu Asp Lys Ser Gly Ser Val Leu His His Trp Asn Glu Ile Tyr Tyr
    50                  55                  60

Phe Val Glu Gln Leu Ala His Lys Phe Ile Ser Pro Gln Leu Arg Met
65                  70                  75                  80

Ser Phe Ile Val Phe Ser Thr Arg Gly Thr Thr Leu Met Lys Leu Thr
            85                  90                  95

Glu Asp Arg Glu Gln Ile Arg Gln Gly Leu Glu Glu Leu Gln Lys Val
            100                 105                 110
```

313

Leu Pro Gly Gly Asp Thr Tyr Met His Glu Gly Phe Glu Arg Ala Ser
        115   120   125

Glu Gln Ile Tyr Tyr Glu Asn Arg Gln Gly Tyr Arg Thr Ala Ser Val
        130   135   140

Ile Ile Ala Leu Thr Asp Gly Glu Leu His Glu Asp Leu Phe Phe Tyr
145   150   155   160

Ser Glu Arg Glu Ala Asn Arg Ser Arg Asp Leu Gly Ala Ile Xaa Tyr
                165   170   175

Cys Val Gly Val Lys Asp Phe Asn Glu Thr Gln Leu Ala Arg Ile Ala
        180   185   190

Asp Ser Lys Asp His Val Phe Pro Val Asn Asp Gly Phe Gln Ala Leu
        195   200   205

Gln Gly Ile Ile His Ser Ile Leu Lys Lys Ser Cys Ile Glu Ile Leu
    210   215   220

Ala Ala Glu Pro Ser Thr Ile Cys Ala Gly Glu Ser Phe Gln Val Val
225   230   235   240

Val Arg Gly Asn Gly Phe Arg His Ala Arg Asn Val Asp Arg Val Leu
                245   250   255

Cys Ser Phe Lys Ile Asn Asp Ser Val Thr Leu Asn Glu Lys Pro Phe
            260   265   270

Ser Val Glu Asp Thr Tyr Leu Leu Cys Pro Ala Pro Ile Leu Lys Glu
        275   280   285

Val Gly Met Lys Ala Ala Leu Gln Val Ser Met Asn Asp Gly Leu Ser
    290   295   300

Phe Ile Ser Ser Ser Val Ile Ile Thr Thr Thr His Cys Ser Asp Xaa
305   310   315   320

Ser Ile Leu Ala Ile Ala Leu Leu Ile Leu Xaa Leu Leu Leu Ala Leu
            325   330   335

Ala Leu Leu Trp Trp Phe Trp Pro Leu Cys Cys Thr Val Ile Ile Lys
            340   345   350

Glu Val Pro Pro Pro Ala Glu Glu Ser Glu Val Ser Asp His Xaa
            355   360   365

Arg Met Ala Val Gly Gly Gln Gly Gly Arg Val Gly Trp Arg Ala Gly
    370   375   380

Trp Ala Ala Gly His Leu Ala Pro Cys Arg Ala Glu Leu Ser Gln Ala
385   390   395   400

Gln Arg Ile

<210> 621

314

<211> 403
<212> PRT
<213> Homo sapiens

<400> 621

```
Met Ala Thr Ala Glu Arg Arg Ala Leu Gly Ile Gly Phe Gln Trp Leu
 1               5                  10                  15

Ser Leu Ala Thr Leu Val Leu Ile Cys Ala Gly Gln Gly Gly Arg Arg
            20                  25                  30

Glu Asp Gly Gly Pro Ala Cys Tyr Gly Gly Phe Asp Leu Tyr Phe Ile
        35                  40                  45

Leu Asp Lys Ser Gly Ser Val Leu His His Trp Asn Glu Ile Tyr Tyr
    50                  55                  60

Phe Val Glu Gln Leu Ala His Lys Phe Ile Ser Pro Gln Leu Arg Met
65                  70                  75                  80

Ser Phe Ile Val Phe Ser Thr Arg Gly Thr Thr Leu Met Lys Leu Thr
                85                  90                  95

Glu Asp Arg Glu Gln Ile Arg Gln Gly Leu Glu Glu Leu Gln Lys Val
            100                 105                 110

Leu Pro Gly Gly Asp Thr Tyr Met His Glu Gly Phe Glu Arg Ala Ser
        115                 120                 125

Glu Gln Ile Tyr Tyr Glu Asn Arg Gln Gly Tyr Arg Thr Ala Ser Val
    130                 135                 140

Ile Ile Ala Leu Thr Asp Gly Glu Leu His Glu Asp Leu Phe Phe Tyr
145                 150                 155                 160

Ser Glu Arg Glu Ala Asn Arg Ser Arg Asp Leu Gly Ala Ile Val Tyr
            165                 170                 175

Cys Val Gly Val Lys Asp Phe Asn Glu Thr Gln Leu Ala Arg Ile Ala
            180                 185                 190

Asp Ser Lys Asp His Val Phe Pro Val Asn Asp Gly Phe Gln Ala Leu
        195                 200                 205

Gln Gly Ile Ile His Ser Ile Leu Lys Lys Ser Cys Ile Glu Ile Leu
    210                 215                 220

Ala Ala Glu Pro Ser Thr Ile Cys Ala Gly Glu Ser Phe Gln Val Val
225                 230                 235                 240

Val Arg Gly Asn Gly Phe Arg His Ala Arg Asn Val Asp Arg Val Leu
                245                 250                 255

Cys Ser Phe Lys Ile Asn Asp Ser Val Thr Leu Asn Glu Lys Pro Phe
            260                 265                 270

Ser Val Glu Asp Thr Tyr Leu Leu Cys Pro Ala Pro Ile Leu Lys Glu
    275                 280                 285

Val Gly Met Lys Ala Ala Leu Gln Val Ser Met Asn Asp Gly Leu Ser
```

315

```
        290                    295                    300

Phe Ile Ser Ser Ser Val Ile Ile Thr Thr Thr His Cys Ser Asp Gly
305                    310                    315                    320

Ser Ile Leu Ala Ile Ala Leu Leu Ile Leu Phe Leu Leu Leu Ala Leu
                325                    330                    335

Ala Leu Leu Trp Trp Phe Trp Pro Leu Cys Cys Thr Val Ile Ile Lys
            340                    345                    350

Glu Val Pro Pro Pro Pro Ala Glu Glu Ser Glu Val Ser Asp His Ser
            355                    360                    365

Arg Met Ala Val Gly Gly Gln Gly Gly Arg Val Gly Trp Arg Ala Gly
        370                    375                    380

Trp Ala Ala Gly His Leu Ala Pro Cys Arg Ala Glu Leu Ser Gln Ala
385                    390                    395                    400

Gln Arg Ile
```

```
<210> 622
<211> 156
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (102)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 622
Val Val Lys Ile Thr His Cys Pro Thr Leu Leu Thr Arg Asp Gly Asp
  1           5                    10                    15

Arg Ile Arg Ser Asn Gly Lys Phe Gly Gly Leu Gln Asn Lys Ala Pro
            20                    25                    30

Pro Met Asp Lys Leu Arg Gly Met Val Phe Gly Ala Pro Val Pro Lys
        35                    40                    45

Gln Cys Leu Ile Leu Gly Glu Gln Ile Asp Leu Leu Gln Gln Tyr Arg
    50                    55                    60

Ser Ala Val Cys Lys Leu Asp Ser Val Asn Lys Asp Leu Asn Ser Gln
65                    70                    75                    80

Leu Glu Tyr Leu Arg Thr Pro Asp Met Arg Lys Lys Lys Gln Glu Leu
                85                    90                    95

Asp Glu His Glu Lys Xaa Leu Lys Leu Ile Glu Glu Lys Leu Gly Met
                100                    105                    110

Thr Pro Ile Arg Lys Cys Asn Asp Ser Leu Arg His Ser Pro Lys Val
            115                    120                    125
```

```
Glu Thr Thr Asp Cys Pro Val Pro Pro Lys Arg Met Arg Arg Glu Ala
    130                 135             140

Thr Arg Gln Asn Arg Ile Ile Thr Lys Thr Asp Val
145                 150             155
```

```
<210> 623
<211> 175
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (91)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (173)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (174)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (175)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 623
Val Phe Gly Met Leu Leu Gly Asp Thr Ile Ile Leu Asp Asn Leu Asp
  1               5               10              15

Ala Ala Asn His Tyr Arg Lys Glu Val Val Lys Ile Thr His Cys Pro
                20              25              30

Thr Leu Leu Thr Arg Asp Gly Asp Arg Ile Arg Ser Asn Gly Lys Phe
    35              40              45

Gly Gly Leu Gln Asn Lys Ala Pro Pro Met Asp Lys Leu Arg Gly Met
    50              55              60

Val Phe Gly Ala Pro Val Pro Lys Gln Cys Leu Ile Leu Gly Glu Gln
 65              70              75              80

Ile Asp Leu Leu Gln Gln Tyr Arg Ser Ala Xaa Cys Lys Leu Asp Ser
                85              90              95

Val Asn Lys Asp Leu Asn Ser Gln Leu Glu Tyr Leu Arg Thr Pro Asp
                100             105             110

Met Arg Lys Lys Lys Gln Glu Leu Asp Glu His Glu Lys Asn Leu Lys
        115             120             125

Leu Ile Glu Glu Lys Leu Gly Met Thr Pro Ile Arg Lys Cys Asn Asp
    130             135             140
```

317

```
Ser Leu Arg His Ser Pro Lys Val Glu Thr Thr Asp Cys Pro Val Pro
145                 150                 155                 160

Pro Lys Arg Met Arg Arg Glu Ala Gly Asp Lys Arg Xaa Xaa Xaa
                165                 170                 175
```

```
<210> 624
<211> 24
<212> PRT
<213> Homo sapiens
```

```
<400> 624
Met Trp His Leu Trp Arg Arg Leu Leu Ser Cys Phe Pro Val Ala Met
1               5                   10                  15

Leu Gln Asp Tyr Lys Tyr Ser Val
            20
```

```
<210> 625
<211> 20
<212> PRT
<213> Homo sapiens
```

```
<400> 625
Ser Cys Leu Pro Val Gly Thr Asp Pro Gln Gln Met Gln Lys His Leu
1               5                   10                  15

Val Val Ile Lys
            20
```

```
<210> 626
<211> 24
<212> PRT
<213> Homo sapiens
```

```
<400> 626
Met Trp His Leu Trp Arg Arg Leu Leu Ser Cys Phe Pro Val Ala Met
1               5                   10                  15

Leu Gln Asp Tyr Lys Tyr Ser Val
            20
```

```
<210> 627
<211> 439
<212> PRT
<213> Homo sapiens
```

```
<220>
<221> SITE
<222> (358)
<223> Xaa equals any of the naturally occurring L-amino acids
```

318

<400> 627

```
Met Val Pro Ser Ser Pro Arg Ala Leu Phe Leu Leu Leu Leu Ile Leu
 1               5                   10                  15

Ala Cys Pro Glu Pro Arg Ala Ser Gln Asn Cys Leu Ser Lys Gln Gln
            20                  25                  30

Leu Leu Ser Ala Ile Arg Gln Leu Gln Gln Leu Leu Lys Gly Gln Glu
            35                  40                  45

Thr Arg Phe Ala Glu Gly Ile Arg His Met Lys Ser Arg Leu Ala Ala
     50                  55                  60

Leu Gln Asn Ser Val Gly Arg Val Gly Pro Asp Ala Leu Pro Val Ser
 65                  70                  75                  80

Cys Pro Ala Leu Asn Thr Pro Ala Asp Gly Arg Lys Phe Gly Ser Lys
                85                  90                  95

Tyr Leu Val Asp His Glu Val His Phe Thr Cys Asn Pro Gly Phe Arg
            100                 105                 110

Leu Val Gly Pro Ser Ser Val Val Cys Leu Pro Asn Gly Thr Trp Thr
            115                 120                 125

Gly Glu Gln Pro His Cys Arg Gly Ile Ser Glu Cys Ser Ser Gln Pro
    130                 135                 140

Cys Gln Asn Gly Gly Thr Cys Val Glu Gly Val Asn Gln Tyr Arg Cys
145                 150                 155                 160

Ile Cys Pro Pro Gly Arg Thr Gly Asn Arg Cys Gln His Gln Ala Gln
            165                 170                 175

Thr Ala Ala Pro Glu Gly Ser Val Ala Gly Asp Ser Ala Phe Ser Arg
            180                 185                 190

Ala Pro Arg Cys Ala Gln Val Glu Arg Ala Gln His Cys Ser Cys Glu
    195                 200                 205

Ala Gly Phe His Leu Ser Gly Ala Ala Gly Asp Ser Val Cys Gln Asp
    210                 215                 220

Val Asn Glu Cys Glu Leu Tyr Gly Gln Glu Gly Arg Pro Arg Leu Cys
225                 230                 235                 240

Met His Ala Cys Val Asn Thr Pro Gly Ser Tyr Arg Cys Thr Cys Pro
                245                 250                 255

Gly Gly Tyr Arg Thr Leu Ala Asp Gly Lys Ser Cys Glu Asp Val Asp
            260                 265                 270

Glu Cys Val Gly Leu Gln Pro Val Cys Pro Gln Gly Thr Thr Cys Ile
            275                 280                 285

Asn Thr Gly Gly Ser Phe Gln Cys Val Ser Pro Glu Cys Pro Glu Gly
            290                 295                 300

Ser Gly Asn Val Ser Tyr Val Lys Thr Ser Pro Phe Gln Cys Glu Arg
```

```
305                      310                      315                      320

Asn Pro Cys Pro Met Asp Ser Arg Pro Cys Arg His Leu Pro Lys Thr
            325                 330              335

Ile Ser Phe His Tyr Leu Ser Leu Pro Ser Asn Leu Lys Thr Pro Ile
            340                 345                 350

Thr Leu Phe Arg Met Xaa Thr Ala Ser Ala Pro Gly Arg Ala Gly Pro
            355             360                 365

Asn Ser Leu Arg Phe Gly Ile Val Gly Gly Asn Ser Arg Gly His Phe
    370                 375                 380

Val Met Gln Arg Ser Asp Arg Gln Thr Gly Asp Leu Ile Leu Val Gln
385                 390                 395                 400

Asn Leu Glu Gly Pro Gln Thr Leu Glu Val Asp Val Asp Met Ser Glu
                405                 410                 415

Tyr Leu Asp Arg Ser Phe Gln Ala Asn His Val Ser Lys Val Thr Ile
            420                 425                 430

Phe Val Ser Pro Tyr Asp Phe
            435
```

```
<210> 628
<211> 439
<212> PRT
<213> Homo sapiens

<400> 628
Met Val Pro Ser Ser Pro Arg Ala Leu Phe Leu Leu Leu Leu Ile Leu
  1               5                  10                  15

Ala Cys Pro Glu Pro Arg Ala Ser Gln Asn Cys Leu Ser Lys Gln Gln
            20                  25                  30

Leu Leu Ser Ala Ile Arg Gln Leu Gln Gln Leu Leu Lys Gly Gln Glu
            35                  40                  45

Thr Arg Phe Ala Glu Gly Ile Arg His Met Lys Ser Arg Leu Ala Ala
    50                  55                  60

Leu Gln Asn Ser Val Gly Arg Val Gly Pro Asp Ala Leu Pro Val Ser
65                  70                  75                  80

Cys Pro Ala Leu Asn Thr Pro Ala Asp Gly Arg Lys Phe Gly Ser Lys
            85                  90                  95

Tyr Leu Val Asp His Glu Val His Phe Thr Cys Asn Pro Gly Phe Arg
            100                 105                 110

Leu Val Gly Pro Ser Ser Val Val Cys Leu Pro Asn Gly Thr Trp Thr
            115                 120                 125

Gly Glu Gln Pro His Cys Arg Gly Ile Ser Glu Cys Ser Ser Gln Pro
    130                 135                 140
```

```
Cys Gln Asn Gly Gly Thr Cys Val Glu Gly Val Asn Gln Tyr Arg Cys
145                 150             155                     160

Ile Cys Pro Pro Gly Arg Thr Gly Asn Arg Cys Gln His Gln Ala Gln
                165             170                 175

Thr Ala Ala Pro Glu Gly Ser Val Ala Gly Asp Ser Ala Phe Ser Arg
                180             185                 190

Ala Pro Arg Cys Ala Gln Val Glu Arg Ala Gln His Cys Ser Cys Glu
            195             200                 205

Ala Gly Phe His Leu Ser Gly Ala Ala Gly Asp Ser Val Cys Gln Asp
        210             215                 220

Val Asn Glu Cys Glu Leu Tyr Gly Gln Glu Gly Arg Pro Arg Leu Cys
225                 230             235                     240

Met His Ala Cys Val Asn Thr Pro Gly Ser Tyr Arg Cys Thr Cys Pro
            245             250                 255

Gly Gly Tyr Arg Thr Leu Ala Asp Gly Lys Ser Cys Glu Asp Val Asp
            260             265                 270

Glu Cys Val Gly Leu Gln Pro Val Cys Pro Gln Gly Thr Thr Cys Ile
        275             280                 285

Asn Thr Gly Gly Ser Phe Gln Cys Val Ser Pro Glu Cys Pro Glu Gly
    290             295                 300

Ser Gly Asn Val Ser Tyr Val Lys Thr Ser Pro Phe Gln Cys Glu Arg
305                 310                 315                 320

Asn Pro Cys Pro Met Asp Ser Arg Pro Cys Arg His Leu Pro Lys Thr
            325                 330                 335

Ile Ser Phe His Tyr Leu Ser Leu Pro Ser Asn Leu Lys Thr Pro Ile
            340                 345                 350

Thr Leu Phe Arg Met Ala Thr Ala Ser Ala Pro Gly Arg Ala Gly Pro
            355                 360                 365

Asn Ser Leu Arg Phe Gly Ile Val Gly Gly Asn Ser Arg Gly His Phe
    370             375                 380

Val Met Gln Arg Ser Asp Arg Gln Thr Gly Asp Leu Ile Leu Val Gln
385                 390                 395                     400

Asn Leu Glu Gly Pro Gln Thr Leu Glu Val Asp Val Asp Met Ser Glu
                405                 410                 415

Tyr Leu Asp Arg Ser Phe Gln Ala Asn His Val Ser Lys Val Thr Ile
            420                 425                 430

Phe Val Ser Pro Tyr Asp Phe
            435
```

321

<210> 629
<211> 32
<212> PRT
<213> Homo sapiens

<400> 629
Trp Asn Pro Ile Ser Met Lys Asn Lys Leu Lys Ile Leu Lys Ile Lys
1   5   10   15

Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Gly Arg Pro
                20   25   30

<210> 630
<211> 15
<212> PRT
<213> Homo sapiens

<400> 630
Pro Ala Pro Leu Pro Leu Arg Trp Ser Pro Ala Gly Pro Gly Gln
1   5   10   15

<210> 631
<211> 44
<212> PRT
<213> Homo sapiens

<400> 631
Met Ala Pro Ala Cys Gln Ile Leu Arg Trp Ala Leu Ala Leu Gly Leu
1   5   10   15

Gly Leu Met Phe Glu Val Thr His Ala Phe Arg Ser Gln Gly Arg Gly
                20   25   30

Ser Leu Val Val Ala Val Gly Arg Glu Arg Lys Met
            35   40

<210> 632
<211> 44
<212> PRT
<213> Homo sapiens

<400> 632
Met Ala Pro Ala Cys Gln Ile Leu Arg Trp Ala Leu Ala Leu Gly Leu
1   5   10   15

Gly Leu Met Phe Glu Val Thr His Ala Phe Arg Ser Gln Gly Arg Gly
                20   25   30

Ser Leu Val Val Ala Val Gly Arg Glu Arg Lys Met
            35   40

322

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<210> 633
<211> 42
<212> PRT
<213> Homo sapiens

<400> 633
Met Phe Lys Lys Asp Leu Ile Cys Lys Arg Trp Ser Phe Phe Phe Trp
1   5   10   15

Gly Leu Leu Ile Ser Val Val Ile Leu Thr Ser Phe Ser Asn Tyr Ser
            20   25   30

Arg Arg Phe Tyr Leu Asp Leu Tyr Phe Ser
        35   40

<210> 634
<211> 7
<212> PRT
<213> Homo sapiens

<400> 634
Phe Ile Gly Phe Ile Leu Cys
1   5

<210> 635
<211> 42
<212> PRT
<213> Homo sapiens

<400> 635
Met Phe Lys Lys Asp Leu Ile Cys Lys Arg Trp Ser Phe Phe Phe Trp
1   5   10   15

Gly Leu Leu Ile Ser Val Val Ile Leu Thr Ser Phe Ser Asn Tyr Ser
            20   25   30

Arg Arg Phe Tyr Leu Asp Leu Tyr Phe Ser
        35   40

<210> 636
<211> 93
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (13)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (39)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 636
```
Trp Phe Gln Thr Val Asp Arg His Cys Phe Val Leu Xaa Thr Asp Lys
 1           5              10              15

Val Lys Leu Thr Trp Arg Asp Arg Phe Pro Ala Tyr Leu Thr Asn Leu
        20              25              30

Val Ser Ile Ile Phe Met Xaa Ser Ser Arg Arg Leu Arg Pro Asp Glu
        35              40              45

Val Arg Gly Asn Arg Lys Glu Val Ile Gly Phe Ser Arg Ala Trp Trp
    50              55              60

Phe Thr Thr Val Ile Pro Ala Leu Trp Glu Ala Glu Ala Gly Arg Ser
65              70              75              80

Leu Glu Val Arg Ser Ser Arg Pro Ala Trp Pro Ile Trp
            85              90
```

<210> 637
<211> 35
<212> PRT
<213> Homo sapiens

<400> 637
```
Met Ser Leu Gly Phe Trp Val Trp Leu Pro Ser Cys Cys His Lys Met
 1           5              10              15

Leu Val Val Thr Cys Thr Phe Gly His Tyr Leu Pro Leu Glu Ser Ser
            20              25              30

His His Leu
        35
```

<210> 638
<211> 35
<212> PRT
<213> Homo sapiens

<400> 638
```
Met Ser Leu Gly Phe Trp Val Trp Leu Pro Ser Cys Cys His Lys Met
 1           5              10              15

Leu Val Val Thr Cys Thr Phe Gly His Tyr Leu Pro Leu Glu Ser Ser
            20              25              30

His His Leu
        35
```

<210> 639
<211> 394
<212> PRT

<213> Homo sapiens

<400> 639

```
Val Thr Thr Leu Phe Leu Gly Pro Cys Tyr Cys Arg Gly Arg Leu His
 1               5                  10                  15

Gly Leu Arg Gln Glu Ser Arg Leu Gly Asp Arg Ser Leu Val Ile Gly
            20              25                  30

Ala Gly Ala Cys Tyr Cys Ile Tyr Arg Leu Thr Arg Gly Arg Lys Gln
            35              40                  45

Asn Lys Glu Lys Met Ala Glu Gly Gly Ser Gly Asp Val Asp Asp Ala
    50              55                  60

Gly Asp Cys Ser Gly Ala Arg Tyr Asn Asp Trp Ser Asp Asp Asp Asp
65              70              75                      80

Asp Ser Asn Glu Ser Lys Ser Ile Val Trp Tyr Pro Pro Trp Ala Arg
            85              90                  95

Ile Gly Thr Glu Ala Gly Thr Arg Ala Arg Ala Arg Ala Arg Ala Arg
            100             105                 110

Ala Thr Arg Ala Arg Arg Ala Val Gln Lys Arg Ala Ser Pro Asn Ser
        115             120                 125

Asp Asp Thr Val Leu Ser Pro Gln Glu Leu Gln Lys Val Leu Cys Leu
    130             135                 140

Val Glu Met Ser Glu Lys Pro Tyr Ile Leu Glu Ala Ala Leu Ile Ala
145             150                 155             160

Leu Gly Asn Asn Ala Ala Tyr Ala Phe Asn Arg Asp Ile Ile Arg Asp
            165             170                 175

Leu Gly Gly Leu Pro Ile Val Ala Lys Ile Leu Asn Thr Arg Asp Pro
            180             185                 190

Ile Val Lys Glu Lys Ala Leu Ile Val Leu Asn Asn Leu Ser Val Asn
        195             200                 205

Ala Glu Asn Gln Arg Arg Leu Lys Val Tyr Met Asn Gln Val Cys Asp
    210             215                 220

Asp Thr Ile Thr Ser Arg Leu Asn Ser Ser Val Gln Leu Ala Gly Leu
225             230             235                 240

Arg Leu Leu Thr Asn Met Thr Val Thr Asn Glu Tyr Gln His Met Leu
            245             250                 255

Ala Asn Ser Ile Ser Asp Phe Phe Arg Leu Phe Ser Ala Gly Asn Glu
            260             265                 270

Glu Thr Lys Leu Gln Val Leu Lys Leu Leu Leu Asn Leu Ala Glu Asn
            275             280                 285

Pro Ala Met Thr Arg Glu Leu Leu Arg Ala Gln Val Pro Ser Ser Leu
    290             295                 300
```

325

```
Gly Ser Leu Phe Asn Lys Lys Glu Asn Lys Glu Val Ile Leu Lys Leu
305           .         310             315                 320

Leu Val Ile Phe Glu Asn Ile Asn Asp Asn Phe Lys Trp Glu Glu Asn
                325             330                 335

Glu Pro Thr Gln Asn Gln Phe Gly Glu Gly Ser Leu Phe Phe Phe Leu
            340             345                 350

Lys Glu Phe Gln Val Cys Ala Asp Lys Val Leu Gly Ile Glu Ser His
        355             360                 365

His Asp Phe Leu Val Lys Val Lys Val Gly Lys Phe Met Ala Lys Leu
    370             375                 380

Ala Glu His Met Phe Pro Lys Ser Gln Glu
385                 390
```

<210> 640
<211> 49
<212> PRT
<213> Homo sapiens

<400> 640

```
Met Ser Pro Arg Pro Leu Ile Ala Arg Cys Glu Ala Leu Gly Cys Gly
1               5               10                  15

Ala Arg Arg Leu Pro Trp Trp Ala Leu Ala Met Ala Leu Cys Ala Cys
            20              25                  30

Gly Arg Cys Val Ala Ala Asn Ser Ile Gly Glu Thr Leu Pro Ser Glu
        35              40                  45

Val
```

<210> 641
<211> 49
<212> PRT
<213> Homo sapiens

<400> 641

```
Met Ser Pro Arg Pro Leu Ile Ala Arg Cys Glu Ala Leu Gly Cys Gly
1               5               10                  15

Ala Arg Arg Leu Pro Trp Trp Ala Leu Ala Met Ala Leu Cys Ala Cys
            20              25                  30

Gly Arg Cys Val Ala Ala Asn Ser Ile Gly Glu Thr Leu Pro Ser Glu
        35              40                  45

Val
```

```
<210> 642
<211> 85
<212> PRT
<213> Homo sapiens

<400> 642
Pro Ser Val Ala Leu Cys Trp Ile Phe Phe Ile Pro Leu Gly Lys Trp
  1               5                  10                  15

Glu Phe Phe Tyr Arg Pro Ala Ile Leu Leu Leu Cys Gln Ile Ala Leu
             20                  25                  30

Tyr Tyr Gln Asp Thr Pro Met Ala His Phe Arg Leu Thr Glu Leu Phe
          35                  40                  45

Leu Tyr Glu Cys Thr Val Val Ile Phe Trp Ala Val Cys Glu Phe Leu
       50                  55                  60

Val Thr His Pro Leu Thr Thr Lys Ala Leu Ser Glu Gln Tyr Lys Ser
 65               70                  75                  80

Ile Lys Ala Gln Ile
                85
```


```
<210> 643
<211> 85
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (8)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (33)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 643
Met Val Gly Leu Pro Ala Val Xaa Gln Leu Phe Trp Gly Leu Cys Leu
  1               5                  10                  15

Cys Thr Cys Gly Leu Tyr Pro Ala Pro Gln Ser Trp Leu Ser Ser Gly
             20                  25                  30

Xaa Tyr Lys Val Thr Ser Gly Ala Pro Ser Glu Arg Met Trp Pro Gln
          35                  40                  45

Arg His Ala Ser Gly Phe Arg Leu Ser Gly Arg Thr Cys Leu Arg Ala
        50                  55                  60

Thr Ala Pro Ser Pro Ser Phe Pro Phe Phe Ser Ala Val Ile Asn Leu
 65               70                  75                  80

Ser Ala Cys Ser Lys
                85
```

<210> 644
<211> 54
<212> PRT
<213> Homo sapiens

<400> 644
Met Val Gly Leu Pro Ala Val Val Gln Leu Phe Trp Gly Leu Cys Leu
1   5   10   15

Cys Thr Cys Gly Ala Val Ser Cys Pro Thr Glu Leu Ala Val Gln Trp
                20   25   30

Arg Ile Gln Ser Asp Ile Trp Cys Ser Leu Arg Lys Asn Val Ala Pro
            35   40   45

Glu Ala Cys Gln Trp Leu
        50

<210> 645
<211> 81
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (67)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (76)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (81)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 645
Met Ile Leu Gly Ile His Trp Gly Ile Phe Leu Leu Leu Leu Leu Ser
1   5   10   15

Trp Leu Glu Leu Gln Arg Thr Val Ile Phe Phe Phe Ser Pro Phe Pro
                20   25   30

Ile Gln Lys His Tyr Thr Leu Gly His Phe Ser Phe Ser Gln Arg Arg
            35   40   45

Phe Met Asp Ser Gln Thr Glu Leu Cys Ala Thr Gly Lys Val Lys Arg
        50   55   60

Glu Lys Xaa Ala Asp Glu Val Thr Trp Leu His Xaa Leu His His Ala
65   70   75   80

Xaa

<210> 646
<211> 73
<212> PRT
<213> Homo sapiens

<400> 646
Ile Phe Leu Leu Leu Leu Leu Ser Trp Leu Glu Leu Gln Arg Thr Val
 1   5   10   15

Ile Phe Phe Phe Ser Pro Phe Pro Ile Gln Lys His Tyr Thr Leu Gly
            20   25   30

His Phe Ser Phe Ser Gln Arg Arg Phe Met Asp Ser Gln Thr Glu Leu
        35   40   45

Cys Ala Thr Gly Lys Val Lys Arg Glu Lys Ala Ala Asp Glu Val Thr
    50   55   60

Trp Leu His Val Leu His His Ala Glu
65   70

<210> 647
<211> 9
<212> PRT
<213> Homo sapiens

<400> 647
Trp Gly Leu Leu Tyr Leu Glu Leu Asn
 1   5

<210> 648
<211> 81
<212> PRT
<213> Homo sapiens

<400> 648
Met Ile Leu Gly Ile His Trp Gly Ile Phe Leu Leu Leu Leu Leu Ser
 1   5   10   15

Trp Leu Glu Leu Gln Arg Thr Val Ile Phe Phe Phe Ser Pro Phe Pro
            20   25   30

Ile Gln Lys His Tyr Thr Leu Gly His Phe Ser Phe Ser Gln Arg Arg
        35   40   45

Phe Met Asp Ser Gln Thr Glu Leu Cys Ala Thr Gly Lys Val Lys Arg
    50   55   60

Glu Lys Ala Ala Asp Glu Val Thr Trp Leu His Val Leu His His Ala
65   70   75   80

Glu

```
<210> 649
<211> 870
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (534)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 649
Met Gly Pro Pro Ser Leu Val Leu Cys Leu Leu Ser Ala Thr Val Phe
 1               5                  10                  15

Ser Leu Leu Gly Gly Ser Ser Ala Phe Leu Ser His His Arg Leu Lys
                20                  25                  30

Gly Arg Phe Gln Arg Asp Arg Arg Asn Ile Arg Pro Asn Ile Ile Leu
            35                  40                  45

Val Leu Thr Asp Asp Gln Asp Val Glu Leu Gly Ser Met Gln Val Met
     50                  55                  60

Asn Lys Thr Arg Arg Ile Met Glu Gln Gly Gly Ala His Phe Ile Asn
 65                  70                  75                  80

Ala Phe Val Thr Thr Pro Met Cys Cys Pro Ser Arg Ser Ser Ile Leu
                85                  90                  95

Thr Gly Lys Tyr Val His Asn His Asn Thr Tyr Thr Asn Asn Glu Asn
            100                 105                 110

Cys Ser Ser Pro Ser Trp Gln Ala Gln His Glu Ser Arg Thr Phe Ala
            115                 120                 125

Val Tyr Leu Asn Ser Thr Gly Tyr Arg Thr Ala Phe Phe Gly Lys Tyr
     130                 135                 140

Leu Asn Glu Tyr Asn Gly Ser Tyr Val Pro Pro Gly Trp Lys Glu Trp
145                 150                 155                 160

Val Gly Leu Leu Lys Asn Ser Arg Phe Tyr Asn Tyr Thr Leu Cys Arg
                165                 170                 175

Asn Gly Val Lys Glu Lys His Gly Ser Asp Tyr Ser Lys Asp Tyr Leu
            180                 185                 190

Thr Asp Leu Ile Thr Asn Asp Ser Val Ser Phe Phe Arg Thr Ser Lys
            195                 200                 205

Lys Met Tyr Pro His Arg Pro Val Leu Met Val Ile Ser His Ala Ala
     210                 215                 220

Pro His Gly Pro Glu Asp Ser Ala Pro Gln Tyr Ser Arg Leu Phe Pro
225                 230                 235                 240

Asn Ala Ser Gln His Ile Thr Pro Ser Tyr Asn Tyr Ala Pro Asn Pro
```

330

```
                    245                      250                      255

Asp Lys His Trp Ile Met Arg Tyr Thr Gly Pro Met Lys Pro Ile His
            260                  265                  270

Met Glu Phe Thr Asn Met Leu Gln Arg Lys Arg Leu Gln Thr Leu Met
            275                  280                  285

Ser Val Asp Asp Ser Met Glu Thr Ile Tyr Asn Met Leu Val Glu Thr
        290                  295                  300

Gly Glu Leu Asp Asn Thr Tyr Ile Val Tyr Thr Ala Asp His Gly Tyr
305                  310                  315                  320

His Ile Gly Gln Phe Gly Leu Val Lys Gly Lys Ser Met Pro Tyr Glu
                325                  330                  335

Phe Asp Ile Arg Val Pro Phe Tyr Val Arg Gly Pro Asn Val Glu Ala
            340                  345                  350

Gly Cys Leu Asn Pro His Ile Val Leu Asn Ile Asp Leu Ala Pro Thr
            355                  360                  365

Ile Leu Asp Ile Ala Gly Leu Asp Ile Pro Ala Asp Met Asp Gly Lys
    370                  375                  380

Ser Ile Leu Lys Leu Leu Asp Thr Glu Arg Pro Val Asn Arg Phe His
385                  390                  395                  400

Leu Lys Lys Lys Met Arg Val Trp Arg Asp Ser Phe Leu Val Glu Arg
                405                  410                  415

Gly Lys Leu Leu His Lys Arg Asp Asn Asp Lys Val Asp Ala Gln Glu
            420                  425                  430

Glu Asn Phe Leu Pro Lys Tyr Gln Arg Val Lys Asp Leu Cys Gln Arg
            435                  440                  445

Ala Glu Tyr Gln Thr Ala Cys Glu Gln Leu Gly Gln Lys Trp Gln Cys
    450                  455                  460

Val Glu Asp Ala Thr Gly Lys Leu Lys Leu His Lys Cys Lys Gly Pro
465                  470                  475                  480

Met Arg Leu Gly Gly Ser Arg Ala Leu Ser Asn Leu Val Pro Lys Tyr
                485                  490                  495

Tyr Gly Gln Gly Ser Glu Ala Cys Thr Cys Asp Ser Gly Asp Tyr Lys
            500                  505                  510

Leu Ser Leu Ala Gly Arg Arg Lys Lys Leu Phe Lys Lys Lys Tyr Lys
            515                  520                  525

Ala Ser Tyr Val Arg Xaa Arg Ser Ile Arg Ser Val Ala Ile Glu Val
        530                  535                  540

Asp Gly Arg Val Tyr His Val Gly Leu Gly Asp Ala Ala Gln Pro Arg
545                  550                  555                  560

Asn Leu Thr Lys Arg His Trp Pro Gly Ala Pro Glu Asp Gln Asp Asp
```

331

```
                   565                      570                      575
Lys Asp Gly Gly Asp Phe Ser Gly Thr Gly Gly Leu Pro Asp Tyr Ser
            580                      585                590

Ala Ala Asn Pro Ile Lys Val Thr His Arg Cys Tyr Ile Leu Glu Asn
            595                      600                605

Asp Thr Val Gln Cys Asp Leu Asp Leu Tyr Lys Ser Leu Gln Ala Trp
    610                      615                620

Lys Asp His Lys Leu His Ile Asp His Glu Ile Glu Thr Leu Gln Asn
625                      630                635                    640

Lys Ile Lys Asn Leu Arg Glu Val Arg Gly His Leu Lys Lys Lys Arg
            645                      650                655

Pro Glu Glu Cys Asp Cys His Lys Ile Ser Tyr His Thr Gln His Lys
            660                      665                 670

Gly Arg Leu Lys His Arg Gly Ser Ser Leu His Pro Phe Arg Lys Gly
            675                      680                685

Leu Gln Glu Lys Asp Lys Val Trp Leu Leu Arg Glu Gln Lys Arg Lys
    690                      695                700

Lys Lys Leu Arg Lys Leu Leu Lys Arg Leu Gln Asn Asn Asp Thr Cys
705                      710                715                    720

Ser Met Pro Gly Leu Thr Cys Phe Thr His Asp Asn Gln His Trp Gln
            725                      730                735

Thr Ala Pro Phe Trp Thr Leu Gly Pro Phe Cys Ala Cys Thr Ser Ala
            740                      745                750

Asn Asn Asn Thr Tyr Trp Cys Met Arg Thr Ile Asn Glu Thr His Asn
            755                      760                765

Phe Leu Phe Cys Glu Phe Ala Thr Gly Phe Leu Glu Tyr Phe Asp Leu
    770                      775                780

Asn Thr Asp Pro Tyr Gln Leu Met Asn Ala Val Asn Thr Leu Asp Arg
785                      790                795                    800

Asp Val Leu Asn Gln Leu His Val Gln Leu Met Glu Leu Arg Ser Cys
            805                      810                815

Lys Gly Tyr Lys Gln Cys Asn Pro Arg Thr Arg Asn Met Asp Leu Gly
            820                      825                830

Leu Lys Asp Gly Gly Ser Tyr Glu Gln Tyr Arg Gln Phe Gln Arg Arg
            835                      840                845

Lys Trp Pro Glu Met Lys Arg Pro Ser Ser Lys Ser Leu Gly Gln Leu
    850                      855                860

Trp Glu Gly Trp Glu Gly
865                870
```

<210> 650
<211> 870
<212> PRT
<213> Homo sapiens

<400> 650

```
Met Gly Pro Pro Ser Leu Val Leu Cys Leu Leu Ser Ala Thr Val Phe
  1               5                  10                  15

Ser Leu Leu Gly Gly Ser Ser Ala Phe Leu Ser His His Arg Leu Lys
             20                  25                  30

Gly Arg Phe Gln Arg Asp Arg Arg Asn Ile Arg Pro Asn Ile Ile Leu
         35                  40                  45

Val Leu Thr Asp Asp Gln Asp Val Glu Leu Gly Ser Met Gln Val Met
     50                  55                  60

Asn Lys Thr Arg Arg Ile Met Glu Gln Gly Gly Ala His Phe Ile Asn
 65                  70                  75                  80

Ala Phe Val Thr Thr Pro Met Cys Cys Pro Ser Arg Ser Ser Ile Leu
             85                  90                      95

Thr Gly Lys Tyr Val His Asn His Asn Thr Tyr Thr Asn Asn Glu Asn
             100                 105                 110

Cys Ser Ser Pro Ser Trp Gln Ala Gln His Glu Ser Arg Thr Phe Ala
         115                 120                 125

Val Tyr Leu Asn Ser Thr Gly Tyr Arg Thr Ala Phe Phe Gly Lys Tyr
     130                 135                 140

Leu Asn Glu Tyr Asn Gly Ser Tyr Val Pro Pro Gly Trp Lys Glu Trp
145                 150                 155                 160

Val Gly Leu Leu Lys Asn Ser Arg Phe Tyr Asn Tyr Thr Leu Cys Arg
             165                 170                     175

Asn Gly Val Lys Glu Lys His Gly Ser Asp Tyr Ser Lys Asp Tyr Leu
             180                 185                 190

Thr Asp Leu Ile Thr Asn Asp Ser Val Ser Phe Phe Arg Thr Ser Lys
         195                 200                 205

Lys Met Tyr Pro His Arg Pro Val Leu Met Val Ile Ser His Ala Ala
     210                 215                 220

Pro His Gly Pro Glu Asp Ser Ala Pro Gln Tyr Ser Arg Leu Phe Pro
225                 230                 235                 240

Asn Ala Ser Gln His Ile Thr Pro Ser Tyr Asn Tyr Ala Pro Asn Pro
             245                 250                 255

Asp Lys His Trp Ile Met Arg Tyr Thr Gly Pro Met Lys Pro Ile His
             260                 265                 270

Met Glu Phe Thr Asn Met Leu Gln Arg Lys Arg Leu Gln Thr Leu Met
             275                 280                 285
```

333

Ser Val Asp Asp Ser Met Glu Thr Ile Tyr Asn Met Leu Val Glu Thr
    290   295   300

Gly Glu Leu Asp Asn Thr Tyr Ile Val Tyr Thr Ala Asp His Gly Tyr
305   310   315   320

His Ile Gly Gln Phe Gly Leu Val Lys Gly Lys Ser Met Pro Tyr Glu
                325   330   335

Phe Asp Ile Arg Val Pro Phe Tyr Val Arg Gly Pro Asn Val Glu Ala
                340   345   350

Gly Cys Leu Asn Pro His Ile Val Leu Asn Ile Asp Leu Ala Pro Thr
                355   360   365

Ile Leu Asp Ile Ala Gly Leu Asp Ile Pro Ala Asp Met Asp Gly Lys
    370   375   380

Ser Ile Leu Lys Leu Leu Asp Thr Glu Arg Pro Val Asn Arg Phe His
385   390   395   400

Leu Lys Lys Lys Met Arg Val Trp Arg Asp Ser Phe Leu Val Glu Arg
                405   410   415

Gly Lys Leu Leu His Lys Arg Asp Asn Asp Lys Val Asp Ala Gln Glu
                420   425   430

Glu Asn Phe Leu Pro Lys Tyr Gln Arg Val Lys Asp Leu Cys Gln Arg
            435   440   445

Ala Glu Tyr Gln Thr Ala Cys Glu Gln Leu Gly Gln Lys Trp Gln Cys
    450   455   460

Val Glu Asp Ala Thr Gly Lys Leu Lys Leu His Lys Cys Lys Gly Pro
465   470   475   480

Met Arg Leu Gly Gly Ser Arg Ala Leu Ser Asn Leu Val Pro Lys Tyr
                485   490   495

Tyr Gly Gln Gly Ser Glu Ala Cys Thr Cys Asp Ser Gly Asp Tyr Lys
            500   505   510

Leu Ser Leu Ala Gly Arg Arg Lys Lys Leu Phe Lys Lys Lys Tyr Lys
    515   520   525

Ala Ser Tyr Val Arg Ser Arg Ser Ile Arg Ser Val Ala Ile Glu Val
    530   535   540

Asp Gly Arg Val Tyr His Val Gly Leu Gly Asp Ala Ala Gln Pro Arg
545   550   555   560

Asn Leu Thr Lys Arg His Trp Pro Gly Ala Pro Glu Asp Gln Asp Asp
            565   570   575

Lys Asp Gly Gly Asp Phe Ser Gly Thr Gly Gly Leu Pro Asp Tyr Ser
            580   585   590

Ala Ala Asn Pro Ile Lys Val Thr His Arg Cys Tyr Ile Leu Glu Asn
        595   600   605

334

```
Asp Thr Val Gln Cys Asp Leu Asp Leu Tyr Lys Ser Leu Gln Ala Trp
    610             615             620

Lys Asp His Lys Leu His Ile Asp His Glu Ile Glu Thr Leu Gln Asn
625             630             635             640

Lys Ile Lys Asn Leu Arg Glu Val Arg Gly His Leu Lys Lys Lys Arg
            645             650             655

Pro Glu Glu Cys Asp Cys His Lys Ile Ser Tyr His Thr Gln His Lys
            660             665             670

Gly Arg Leu Lys His Arg Gly Ser Ser Leu His Pro Phe Arg Lys Gly
        675             680             685

Leu Gln Glu Lys Asp Lys Val Trp Leu Leu Arg Glu Gln Lys Arg Lys
    690             695             700

Lys Lys Leu Arg Lys Leu Leu Lys Arg Leu Gln Asn Asn Asp Thr Cys
705             710             715             720

Ser Met Pro Gly Leu Thr Cys Phe Thr His Asp Asn Gln His Trp Gln
            725             730             735

Thr Ala Pro Phe Trp Thr Leu Gly Pro Phe Cys Ala Cys Thr Ser Ala
            740             745             750

Asn Asn Asn Thr Tyr Trp Cys Met Arg Thr Ile Asn Glu Thr His Asn
        755             760             765

Phe Leu Phe Cys Glu Phe Ala Thr Gly Phe Leu Glu Tyr Phe Asp Leu
    770             775             780

Asn Thr Asp Pro Tyr Gln Leu Met Asn Ala Val Asn Thr Leu Asp Arg
785             790             795             800

Asp Val Leu Asn Gln Leu His Val Gln Leu Met Glu Leu Arg Ser Cys
            805             810             815

Lys Gly Tyr Lys Gln Cys Asn Pro Arg Thr Arg Asn Met Asp Leu Gly
            820             825             830

Leu Lys Asp Gly Gly Ser Tyr Glu Gln Tyr Arg Gln Phe Gln Arg Arg
        835             840             845

Lys Trp Pro Glu Met Lys Arg Pro Ser Ser Lys Ser Leu Gly Gln Leu
    850             855             860

Trp Glu Gly Trp Glu Gly
865             870
```

<210> 651
<211> 204
<212> PRT
<213> Homo sapiens

<400> 651

```
Met Met Pro Leu Leu Ser Leu Ile Phe Ser Ala Leu Phe Ile Leu Phe
1               5               10              15

Gly Thr Val Ile Val Gln Ala Phe Ser Asp Ser Asn Asp Glu Arg Glu
            20              25              30

Ser Ser Pro Pro Glu Lys Glu Glu Ala Gln Glu Lys Thr Gly Lys Thr
        35              40              45

Glu Pro Ser Phe Thr Lys Glu Asn Ser Ser Lys Ile Pro Lys Lys Gly
     50              55              60

Phe Val Glu Val Thr Glu Leu Thr Asp Val Thr Tyr Thr Ser Asn Leu
65              70              75              80

Val Arg Leu Arg Pro Gly His Met Asn Val Val Leu Ile Leu Ser Asn
            85              90              95

Ser Thr Lys Thr Ser Leu Leu Gln Lys Phe Ala Leu Glu Val Tyr Thr
            100             105             110

Phe Thr Gly Ser Ser Cys Leu His Phe Ser Phe Leu Ser Leu Asp Lys
        115             120             125

His Arg Glu Trp Leu Glu Tyr Leu Leu Glu Phe Ala Gln Asp Ala Ala
    130             135             140

Pro Ile Pro Asn Gln Tyr Asp Lys His Phe Met Glu Arg Asp Tyr Thr
145             150             155             160

Gly Tyr Val Leu Ala Leu Asn Gly His Lys Lys Tyr Phe Cys Leu Phe
            165             170             175

Lys Pro Gln Lys Thr Val Glu Glu Glu Glu Ala Ile Gly Ser Cys Ser
            180             185             190

Asp Val Asp Ser Ser Leu Tyr Leu Gly Glu Ser Arg
        195             200
```

```
<210> 652
<211> 332
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (204)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (283)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (305)
<223> Xaa equals any of the naturally occurring L-amino acids
```

336

<400> 652

```
Met Glu Val Arg Lys Leu Ser Ile Ser Trp Gln Phe Leu Ile Val Leu
1               5                   10                  15

Val Leu Ile Leu Gln Ile Leu Ser Ala Leu Asp Phe Asp Pro Tyr Arg
            20                  25                  30

Val Leu Gly Val Ser Arg Thr Ala Ser Gln Ala Asp Ile Lys Lys Ala
        35                  40                  45

Tyr Lys Lys Leu Ala Arg Glu Trp His Pro Asp Lys Asn Lys Asp Pro
    50                  55                  60

Gly Ala Glu Asp Lys Phe Ile Gln Ile Ser Lys Ala Tyr Glu Ile Leu
65                  70                  75                  80

Ser Asn Glu Glu Lys Arg Ser Asn Tyr Asp Gln Tyr Gly Asp Ala Gly
            85                  90                  95

Glu Asn Gln Gly Tyr Gln Lys Gln Gln Gln Arg Glu Tyr Arg Phe
            100                 105                 110

Arg His Phe His Glu Asn Phe Tyr Phe Asp Glu Ser Phe Phe His Phe
        115                 120                 125

Pro Phe Asn Ser Glu Arg Arg Asp Ser Ile Asp Glu Lys Tyr Leu Leu
    130                 135                 140

His Phe Ser His Tyr Val Asn Glu Val Val Pro Asp Ser Phe Lys Lys
145             150                 155                 160

Pro Tyr Leu Ile Lys Ile Thr Ser Asp Trp Cys Phe Ser Cys Ile His
            165                 170                 175

Ile Glu Pro Val Trp Lys Glu Val Ile Gln Glu Leu Glu Glu Leu Gly
        180                 185                 190

Val Gly Ile Gly Val Val His Ala Gly Tyr Glu Xaa Arg Leu Ala His
        195                 200                 205

His Leu Gly Ala His Ser Thr Pro Ser Ile Leu Gly Ile Ile Asn Gly
    210             215                 220

Lys Ile Ser Phe Phe His Asn Ala Val Val Arg Glu Asn Leu Arg Gln
225             230                 235                 240

Phe Val Glu Ser Leu Leu Pro Gly Asn Leu Val Glu Lys Val Thr Asn
            245                 250                 255

Lys Asn Tyr Val Arg Phe Leu Ser Gly Trp Gln Gln Glu Asn Lys Pro
            260                 265                 270

His Val Leu Leu Phe Asp Gln Thr Pro Ile Xaa Pro Leu Leu Tyr Lys
    275                 280                 285

Leu Thr Ala Phe Ala Tyr Lys Asp Tyr Leu Ser Phe Gly Tyr Val Tyr
    290                 295                 300

Xaa Gly Leu Arg Gly Thr Glu Glu Met Thr Arg Arg Tyr Asn Ile Asn
                        337
```

```
      305                   310                   315                   320
      Ile Tyr Ala Pro Thr Leu Leu Ala Leu Lys Asn Ile
                      325                   330



<210> 653
<211> 737
<212> PRT
<213> Homo sapiens

<400> 653
      Met Glu Val Arg Lys Leu Ser Ile Ser Trp Gln Phe Leu Ile Val Leu
      1               5                   10                  15

      Val Leu Ile Leu Gln Ile Leu Ser Ala Leu Asp Phe Asp Pro Tyr Arg
                      20                  25                  30

      Val Leu Gly Val Ser Arg Thr Ala Ser Gln Ala Asp Ile Lys Lys Ala
                  35                  40                  45

      Tyr Lys Lys Leu Ala Arg Glu Trp His Pro Asp Lys Asn Lys Asp Pro
          50                  55                  60

      Gly Ala Glu Asp Lys Phe Ile Gln Ile Ser Lys Ala Tyr Glu Ile Leu
      65                  70                  75                  80

      Ser Asn Glu Glu Lys Arg Ser Asn Tyr Asp Gln Tyr Gly Asp Ala Gly
                      85                  90                  95

      Glu Asn Gln Gly Tyr Gln Lys Gln Gln Gln Arg Glu Tyr Arg Phe
                  100                 105                 110

      Arg His Phe His Glu Asn Phe Tyr Phe Asp Glu Ser Phe Phe His Phe
              115                 120                 125

      Pro Phe Asn Ser Glu Arg Arg Asp Ser Ile Asp Glu Lys Tyr Leu Leu
          130                 135                 140

      His Phe Ser His Tyr Val Asn Glu Val Val Pro Asp Ser Phe Lys Lys
      145                 150                 155                 160

      Pro Tyr Leu Ile Lys Ile Thr Ser Asp Trp Cys Phe Ser Cys Ile His
                  165                 170                 175

      Ile Glu Pro Val Trp Lys Glu Val Ile Gln Glu Leu Glu Glu Leu Gly
                  180                 185                 190

      Val Gly Ile Gly Val Val His Ala Gly Tyr Glu Arg Arg Leu Ala His
                  195                 200                 205

      His Leu Gly Ala His Ser Thr Pro Ser Ile Leu Gly Ile Ile Asn Gly
          210                 215                 220

      Lys Ile Ser Phe Phe His Asn Ala Val Val Arg Glu Asn Leu Arg Gln
      225                 230                 235                 240

      Phe Val Glu Ser Leu Leu Pro Gly Asn Leu Val Glu Lys Val Thr Asn
                  245                 250                 255
```

338

```
Lys Asn Tyr Val Arg Phe Leu Ser Gly Trp Gln Gln Glu Asn Lys Pro
        260             265                 270

His Val Leu Leu Phe Asp Gln Thr Pro Ile Val Pro Leu Leu Tyr Lys
        275             280                 285

Leu Thr Ala Phe Ala Tyr Lys Asp Tyr Leu Ser Phe Gly Tyr Val Tyr
    290             295             300

Val Gly Leu Arg Gly Thr Glu Glu Met Thr Arg Arg Tyr Asn Ile Asn
305             310                 315                 320

Ile Tyr Ala Pro Thr Leu Leu Val Phe Lys Glu His Ile Asn Arg Pro
            325             330                 335

Ala Asp Val Ile Gln Ala Arg Gly Met Lys Lys Gln Ile Ile Asp Asp
        340             345                 350

Phe Ile Thr Arg Asn Lys Tyr Leu Leu Ala Ala Arg Leu Thr Ser Gln
        355             360                 365

Lys Leu Phe His Glu Leu Cys Pro Val Lys Arg Ser His Arg Gln Arg
    370             375                 380

Lys Tyr Cys Val Val Leu Leu Thr Ala Glu Thr Thr Lys Leu Ser Lys
385             390                 395                 400

Pro Phe Glu Ala Phe Leu Ser Phe Ala Leu Ala Asn Thr Gln Asp Thr
            405             410                 415

Val Arg Phe Val His Val Tyr Ser Asn Arg Gln Gln Glu Phe Ala Asp
        420             425                 430

Thr Leu Leu Pro Asp Ser Glu Ala Phe Gln Gly Lys Ser Ala Val Ser
        435             440                 445

Ile Leu Glu Arg Arg Asn Thr Ala Gly Arg Val Val Tyr Lys Thr Leu
    450             455                 460

Glu Asp Pro Trp Ile Gly Ser Glu Ser Asp Lys Phe Ile Leu Leu Gly
465             470                 475                 480

Tyr Leu Asp Gln Leu Arg Lys Asp Pro Ala Leu Leu Ser Ser Glu Ala
            485             490                 495

Val Leu Pro Asp Leu Thr Asp Glu Leu Ala Pro Val Phe Leu Leu Arg
            500             505                 510

Trp Phe Tyr Ser Ala Ser Asp Tyr Ile Ser Asp Cys Trp Asp Ser Ile
        515             520                 525

Phe His Asn Asn Trp Arg Glu Met Met Pro Leu Leu Ser Leu Ile Phe
    530             535                 540

Ser Ala Leu Phe Ile Leu Phe Gly Thr Val Ile Val Gln Ala Phe Ser
545             550             555                 560

Asp Ser Asn Asp Glu Arg Glu Ser Ser Pro Pro Glu Lys Glu Glu Ala
            565             570                 575
```

Gln Glu Lys Thr Gly Lys Thr Glu Pro Ser Phe Thr Lys Glu Asn Ser
        580   585   590

Ser Lys Ile Pro Lys Lys Gly Phe Val Glu Val Thr Glu Leu Thr Asp
        595   600   605

Val Thr Tyr Thr Ser Asn Leu Val Arg Leu Arg Pro Gly His Met Asn
    610   615   620

Val Val Leu Ile Leu Ser Asn Ser Thr Lys Thr Ser Leu Leu Gln Lys
625   630   635   640

Phe Ala Leu Glu Val Tyr Thr Phe Thr Gly Ser Ser Cys Leu His Phe
            645   650   655

Ser Phe Leu Ser Leu Asp Lys His Arg Glu Trp Leu Glu Tyr Leu Leu
        660   665   670

Glu Phe Ala Gln Asp Ala Ala Pro Ile Pro Asn Gln Tyr Asp Lys His
        675   680   685

Phe Met Glu Arg Asp Tyr Thr Gly Tyr Val Leu Ala Leu Asn Gly His
        690   695   700

Lys Lys Tyr Phe Cys Leu Phe Lys Pro Gln Lys Thr Val Glu Glu Glu
705   710   715   720

Glu Ala Ile Gly Ser Cys Ser Asp Val Asp Ser Ser Leu Tyr Leu Gly
            725   730   735

Glu

<210> 654
<211> 42
<212> PRT
<213> Homo sapiens

<400> 654
Met Asn Ser Ser Phe Phe Ile Ser Leu Pro Ala Leu Ile Trp Ser Val
  1   5   10   15

Cys Leu Ile Leu Gly Trp Trp Gln Val Ser Ser Gly Lys Val Ala His
            20   25   30

Cys Gly Phe Ile Phe Cys Phe Pro Asn Asn
            35   40

<210> 655
<211> 111
<212> PRT
<213> Homo sapiens

<400> 655
Cys Gly Ser His Arg Met Ser Trp Lys Met Tyr Cys Pro Leu His Phe

```
        1              5                   10                   15

Ser Gly Arg Val Cys Glu Glu Leu Lys Phe Phe Phe Ser Phe Phe Phe
            20                  25                  30

Phe Leu Arg Arg Ser Leu Thr Pro Ala Gln Ala Thr Ala Gly Asp Ser
            35                  40                  45

Val Ser Lys Lys Gln Arg Glu Glu Arg Lys Lys Glu Lys Lys Glu Gly
        50                  55                  60

Arg Arg Lys Glu Gly Arg Asn Glu Gly Thr Lys Glu Gly Arg Lys Arg
        65                  70                  75                  80

Lys Glu Gly Arg Lys Lys Glu Arg Glu Arg Glu Arg Lys Lys Glu Arg
                85                  90                  95

Lys Lys Glu Arg Lys Lys Glu Lys Lys Lys Lys Lys Thr Gly Thr
            100                 105                 110
```

<210> 656
<211> 42
<212> PRT
<213> Homo sapiens

<400> 656
```
Met Asn Ser Ser Phe Phe Ile Ser Leu Pro Ala Leu Ile Trp Ser Val
    1               5                   10                  15

Cys Leu Ile Leu Gly Trp Trp Gln Val Ser Ser Gly Lys Val Ala His
            20                  25                  30

Cys Gly Phe Ile Phe Cys Phe Pro Asn Asn
            35                  40
```

<210> 657
<211> 128
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (67)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (68)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (70)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>

```
<221> SITE
<222> (96)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 657
Met Pro Val Phe Val Cys Ser Ile Gly Leu Cys Phe Leu Phe Ser Ile
 1               5                  10                  15

Leu Leu Leu Phe Pro Pro Phe Gln Phe Ser Tyr Ile Cys Trp Leu Ser
            20                  25                  30

Gln Ala Ser Val Tyr Ser Pro Ser Pro Ser Leu Ser Asn Leu Glu Val
            35                  40                  45

Leu Leu Cys Leu Ser Ile Leu Leu Met Ile Ile Phe Pro Phe Leu Ile
        50                  55                  60

Ser Ile Xaa Xaa Ile Xaa Ser Ile Gly Arg Leu Ser Thr His Met Gly
 65                  70                  75                  80

Ala His Thr His Thr His Thr His Thr His Thr His Thr His Thr Xaa
                85                  90                  95

Val Cys Tyr Trp Pro Leu Leu Leu Ile Ser Gln Glu Asn Glu Pro Phe
            100                 105                 110

Arg Met Phe Leu Pro Leu His Ser Ala Leu Thr Gln Asn Phe Cys Ser
            115                 120                 125
```

```
<210> 658
<211> 128
<212> PRT
<213> Homo sapiens

<400> 658
Met Pro Val Phe Val Cys Ser Ile Gly Leu Cys Phe Leu Phe Ser Ile
 1               5                  10                  15

Leu Leu Leu Phe Pro Pro Phe Gln Phe Ser Tyr Ile Cys Trp Leu Ser
            20                  25                  30

Gln Ala Ser Val Tyr Ser Pro Ser Pro Ser Leu Ser Asn Leu Glu Val
            35                  40                  45

Leu Leu Cys Leu Ser Ile Leu Leu Met Ile Ile Phe Pro Phe Leu Ile
        50                  55                  60

Ser Ile Ile His Ile Phe Ser Ile Gly Arg Leu Ser Thr His Met Gly
 65                  70                  75                  80

Ala His Thr His Thr His Thr His Thr His Thr His Thr His Thr Gln
                85                  90                  95

Val Cys Tyr Trp Pro Leu Leu Leu Ile Ser Gln Glu Asn Glu Pro Phe
            100                 105                 110
```

342

```
Arg Met Phe Leu Pro Leu His Ser Ala Leu Thr Gln Asn Phe Cys Ser
        115                 120                 125
```

```
<210> 659
<211> 24
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (9)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (18)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 659
Met Ser Trp Arg Val Trp Ala Leu Xaa Phe Phe Pro Ala Val Cys Val
  1               5                 10                  15

Cys Xaa Cys Val Cys Val Tyr Thr
            20
```

```
<210> 660
<211> 65
<212> PRT
<213> Homo sapiens

<400> 660
Val Leu Met Arg Ser Asp Gly Phe Ile Arg Gly Phe Ser Pro Phe Cys
  1               5                 10                  15

Trp Ala Leu Leu Leu Leu Pro Pro Arg Glu Glu Gly Cys Val Cys Phe
            20                  25                  30

Pro Phe Cys His Asp Cys Lys Phe Pro Val Ala Ser Pro Ser Leu Arg
            35                  40                  45

Asn Cys Glu Ser Ile Lys Ala Leu Phe Phe Ile Lys Lys Lys Lys Lys
    50                  55                  60

Asn
 65
```

```
<210> 661
<211> 38
<212> PRT
<213> Homo sapiens
```

343

<400> 661
Met Ser Trp Arg Val Trp Ala Leu Leu Phe Phe Pro Ala Val Cys Val
1   5   10   15

Cys Val Cys Val Cys Val Cys Ala Cys Thr Arg Thr Arg Val Cys Asp
            20   25   30

Glu Thr Ile Lys Leu Val
          35

<210> 662
<211> 37
<212> PRT
<213> Homo sapiens

<400> 662
Met Val Glu Ser Pro Val Cys Gly Leu Leu Glu Gly Trp Phe Phe Leu
1   5   10   15

Leu Phe Ser Leu Ala Phe Leu Ser Thr His Leu Phe Ser Glu Ala Ser
            20   25   30

Pro Leu Ser Ile Leu
          35

<210> 663
<211> 37
<212> PRT
<213> Homo sapiens

<400> 663
Met Val Glu Ser Pro Val Cys Gly Leu Leu Glu Gly Trp Phe Phe Leu
1   5   10   15

Leu Phe Ser Leu Ala Phe Leu Ser Thr His Leu Phe Ser Glu Ala Ser
            20   25   30

Pro Leu Ser Ile Leu
          35

<210> 664
<211> 58
<212> PRT
<213> Homo sapiens

<400> 664
Met Thr Leu Ser Val Leu Gln His Phe Phe Ile Cys Val Leu Leu Ile
1   5   10   15

Leu Leu Leu Asp Thr Asn Leu Cys Arg Gln Ile Ser Ser His Ser Phe
            20   25   30

Glu Phe Ser Gly Asn Gln Pro Leu Val Phe Cys Cys Ile Ser Ser Ile

344

                 35   40   45

    Ser Ala Lys Leu Val Leu Asp Gln Ala Gly
         50   55

    <210> 665
    <211> 2
    <212> PRT
    <213> Homo sapiens

    <400> 665
    Leu Glu
      1

    <210> 666
    <211> 58
    <212> PRT
    <213> Homo sapiens

    <400> 666
    Met Thr Leu Ser Val Leu Gln His Phe Phe Ile Cys Val Leu Leu Ile
      1   5   10   15

    Leu Leu Leu Asp Thr Asn Leu Cys Arg Gln Ile Ser Ser His Ser Phe
                  20   25   30

    Glu Phe Ser Gly Asn Gln Pro Leu Val Phe Cys Cys Ile Ser Ser Ile
              35   40   45

    Ser Ala Lys Leu Val Leu Asp Gln Ala Gly
         50   55

    <210> 667
    <211> 124
    <212> PRT
    <213> Homo sapiens

    <220>
    <221> SITE
    <222> (89)
    <223> Xaa equals any of the naturally occurring L-amino acids

    <220>
    <221> SITE
    <222> (103)
    <223> Xaa equals any of the naturally occurring L-amino acids

    <220>
    <221> SITE
    <222> (104)
    <223> Xaa equals any of the naturally occurring L-amino acids

    <220>
    <221> SITE

```
<222> (113)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (121)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 667
Val Ala Gln Val Gln Val Pro Gly Gly His Ile Gly Leu Gly Tyr Leu
 1               5                   10                  15

Ala Arg Ile Asp Phe His Arg Arg Asp Gly Thr Gly Gly Ile Pro Ala
            20                  25                  30

Arg Ile Asp Gly Gly Glu Ile Asp Val Ala Leu Leu Pro Gly Gln Ala
        35                  40                  45

Val Asp His Ile Met Ala Arg Ala Cys Gly Gly Glu His Leu Ala Glu
    50                  55                  60

Val Gly Arg Gly Thr Val Gln Gly Leu Leu Gly Arg Ala Val Leu Ala
65                  70                  75                  80

Ala Gln Ala Arg Arg Ala Pro Pro Xaa Gln Pro Leu Pro Ala Thr Met
            85                  90                  95

Gly Phe Trp Gly Trp Lys Xaa Xaa Pro Asn Arg Gly Leu Trp Phe Lys
            100                 105                 110

Xaa Trp Lys Pro Pro Phe Gly Ala Xaa Gly Val Pro
        115                 120
```

```
<210> 668
<211> 283
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (174)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (189)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (205)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 668
Met Lys Ile Val Pro Leu Thr Ala Ala Val Leu Ala Leu Val Leu Ala
 1               5                   10                  15

Pro Ala Ala His Ala Gln Pro Ala Asn Lys Ala Thr Thr Val Ser Pro
```

```
              20                    25                    30

Thr Ala Ala Ala Phe Leu Ala Gln Phe Ala Thr Glu Gly Asn Asp Ser
        35                  40                  45

Val Ser Trp Ala Gln Phe Glu Ala Phe Arg Lys Gln Arg Tyr Ala Asp
        50                  55                  60

Thr Asp Arg Asn Gln Asp Gly His Val Asp Glu Gln Glu Tyr Val Asp
65                  70                  75                  80

Glu Tyr Leu Gln Arg Phe Asp Val Arg Leu Ala Asp Ala Arg Ala Gly
                85                  90                  95

His Leu Arg Gln Thr Asp Thr Arg Phe Lys Ala Leu Asp Arg Asp Gly
            100                 105                 110

Asn Gly Ala Ile Ser Arg Ala Glu Tyr Asp Ala Ala Gly Glu Arg Thr
            115                 120                 125

Trp Ala Gly Tyr Glu Arg Ser Gln Asn Ala Thr Gln Glu Thr Ala Ala
    130                 135                 140

Ala Ser Ser Arg Asp Pro Leu Lys Met Pro Thr Ser His Thr Ala Asn
145                 150                 155                 160

Gly Met Leu Asp Leu Tyr Asp Arg Asn Lys Asp Gly Ala Xaa Asp Arg
                165                 170                 175

Glu Glu Phe Asp Ala Val Arg Ala Ala Ser Phe Ala Xaa Thr Asp Thr
                180                 185                 190

Asp Gly Asn Gly Thr Leu Ser Leu Ala Glu Tyr Thr Xaa Glu Phe Glu
            195                 200                 205

Gly Arg Leu Asp Gln Gln Arg Gln Arg Val Arg Ala Asp Ala Glu Arg
    210                 215                 220

Gln Ala Arg Val Arg Phe Ala Ser Leu Asp Lys Asp Thr Asp Gly Arg
225                 230                 235                 240

Met Thr Phe Ala Glu Tyr Gln Leu Ser Gly Lys Arg Met Phe Asp Arg
                245                 250                 255

Ala Asp Ser Asn Gly Asp Gly Val Val Asp Ala Arg Asp Pro Glu Pro
            260                 265                 270

Val Ala Gly Ala His Ser Ala Asn Gly Asn Arg
        275                 280
```

```
<210> 669
<211> 283
<212> PRT
<213> Homo sapiens

<400> 669
Met Lys Ile Val Pro Leu Thr Ala Ala Val Leu Ala Leu Val Leu Ala
  1           5               10                  15
```

```
Pro Ala Ala His Ala Gln Pro Ala Asn Lys Ala Thr Thr Val Ser Pro
            20                  25                  30

Thr Ala Ala Ala Phe Leu Ala Gln Phe Ala Thr Glu Gly Asn Asp Ser
            35                  40                  45

Val Ser Trp Ala Gln Phe Glu Ala Phe Arg Lys Gln Arg Tyr Ala Asp
    50                  55                  60

Thr Asp Arg Asn Gln Asp Gly His Val Asp Glu Gln Glu Tyr Val Asp
 65                 70                  75                  80

Glu Tyr Leu Gln Arg Phe Asp Val Arg Leu Ala Asp Ala Arg Ala Gly
            85                  90                  95

His Leu Arg Gln Thr Asp Thr Arg Phe Lys Ala Leu Asp Arg Asp Gly
           100                 105                 110

Asn Gly Ala Ile Ser Arg Ala Glu Tyr Asp Ala Ala Gly Glu Arg Thr
           115                 120                 125

Trp Ala Gly Tyr Glu Arg Ser Gln Asn Ala Thr Gln Glu Thr Ala Ala
    130                 135                 140

Ala Ser Ser Arg Asp Pro Leu Lys Met Pro Thr Ser His Thr Ala Asn
145                 150                 155                 160

Gly Met Leu Asp Leu Tyr Asp Arg Asn Lys Asp Gly Ala Val Asp Arg
            165                 170                 175

Glu Glu Phe Asp Ala Val Arg Ala Ala Ser Phe Ala Ala Thr Asp Thr
            180                 185                 190

Asp Gly Asn Gly Thr Leu Ser Leu Ala Glu Tyr Thr Ala Glu Phe Glu
            195                 200                 205

Gly Arg Leu Asp Gln Gln Arg Gln Arg Val Arg Ala Asp Ala Glu Arg
    210                 215                 220

Gln Ala Arg Val Arg Phe Ala Ser Leu Asp Lys Asp Thr Asp Gly Arg
225                 230                 235                 240

Met Thr Phe Ala Glu Tyr Gln Leu Ser Gly Lys Arg Met Phe Asp Arg
            245                 250                 255

Ala Asp Ser Asn Gly Asp Gly Val Val Asp Ala Arg Asp Pro Glu Pro
            260                 265                 270

Val Ala Gly Ala His Ser Ala Asn Gly Asn Arg
    275                 280
```

```
<210> 670
<211> 86
<212> PRT
<213> Homo sapiens

<220>
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```
<221> SITE
<222> (4)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (11)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 670
Asn Leu Trp Xaa Ala His Phe Phe Leu Asn Xaa Ser Ser Ile Gln Ile
 1           5               10              15

Glu Tyr Pro Pro Leu Ser Lys Met Leu Glu Thr Pro Lys Gly Lys Gly
            20              25              30

Trp Phe Phe Gly Glu Phe Phe Phe Trp Val Phe Leu Phe Phe Leu Gly
        35              40              45

Phe Ala Phe Gly Phe Trp Asn Ser Leu Phe Val Leu Tyr Leu Phe Val
    50              55              60

Gly His Pro Lys Ser Glu Ile Cys Ser Lys Ile Gln Asn Val Lys Cys
 65              70              75              80

Ser Ser Glu His Phe Leu
                85


<210> 671
<211> 57
<212> PRT
<213> Homo sapiens

<400> 671
Met Gly Leu Leu Pro Gly Trp Leu Leu Leu Trp Ala Arg Leu Lys Cys
 1           5               10              15

Phe Cys Ala Val Gly Leu Gly Ser Leu Ala Ala Val Tyr Gly Arg Gly
            20              25              30

Pro Gly Leu Pro Gln Asp Gln Leu Asp Cys Val Leu Trp Asp Cys Gly
        35              40              45

Thr Leu Gly Leu Tyr Arg Gly Gln Phe
    50              55


<210> 672
<211> 12
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (8)
<223> Xaa equals any of the naturally occurring L-amino acids
```

```
<400> 672
Leu Phe Ser Gly Trp Leu Val Xaa Leu Cys Gly Val
 1               5                 10
```

```
<210> 673
<211> 48
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (31)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 673
Met Gly Glu Thr Leu Val Ser Val Phe Leu Lys Pro Pro Ala Leu Thr
 1               5                 10                  15

Trp Leu Leu Arg Ala Ile Cys Leu Met Val Gln Thr Trp Ala Xaa Gly
               20                 25                  30

Gln Arg Ser Trp Pro Gln Ser Leu Ala Leu Pro Cys Tyr Leu Asn Arg
               35                 40                  45
```

```
<210> 674
<211> 29
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (13)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (17)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (19)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (23)
<223> Xaa equals any of the naturally occurring L-amino acids
```

<400> 674
Met Leu Xaa Ser Asn Ser Phe Ser Pro Ser Leu Ser Xaa Tyr Leu Cys
  1   5   10   15

Xaa Leu Xaa Phe Ser Leu Xaa Ser Ser Lys Ser Ser Lys
          20   25

<210> 675
<211> 29
<212> PRT
<213> Homo sapiens

<400> 675
Met Leu Cys Ser Asn Ser Phe Ser Pro Ser Leu Ser Val Tyr Leu Cys
  1   5   10   15

Ser Leu Cys Phe Ser Leu Val Ser Ser Lys Ser Ser Lys
          20   25

<210> 676
<211> 57
<212> PRT
<213> Homo sapiens

<400> 676
Met Pro Pro His Arg Gln Thr Asp Gly Gln Met Gly Leu Pro Ala Pro
  1   5   10   15

Ala Leu Trp Val Trp Gly Leu Leu Leu Ser Ser Ser Phe Gln Thr Leu
          20   25   30

Leu Pro Ala Phe Pro Lys Pro Pro Ala Leu Asn Leu Gly Cys Ser Thr
          35   40   45

Arg Pro Ile Pro Ser Phe Leu Lys Ile
      50   55

<210> 677
<211> 93
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (24)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (65)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 677

```
Gln Val Ser Leu Pro Thr Arg Leu Leu Gln Met Pro Gly Met Gly Leu
 1               5                  10                  15

Asp Ser Arg Phe Gln Ala Trp Xaa Pro Ser Pro Tyr Leu Gly Pro Gln
            20                  25                  30

Pro Arg Ala Pro Arg Pro Gly Leu Gln Pro Gly Pro Ser Leu Arg Gly
        35              40                  45

Ala Glu Phe Arg Glu Ser Cys Pro Arg Ser Gln Lys Arg Gly Arg Glu
    50              55                  60

Xaa Gly Arg Pro Cys Pro Gly Cys Arg Pro Gly Gly Trp Gly Leu Pro
65              70                  75                      80

Ala Arg Leu Gly Gln Pro Gln Leu Gln Thr Gly Pro Gly
                85              90
```

```
<210> 678
<211> 57
<212> PRT
<213> Homo sapiens

<400> 678
Met Pro Pro His Arg Gln Thr Asp Gly Gln Met Gly Leu Pro Ala Pro
 1               5                  10                  15

Ala Leu Trp Val Trp Gly Leu Leu Leu Ser Ser Ser Phe Gln Thr Leu
            20                  25                  30

Leu Pro Ala Phe Pro Lys Pro Pro Ala Leu Asn Leu Gly Cys Ser Thr
        35              40                  45

Arg Pro Ile Pro Ser Phe Leu Lys Ile
    50              55
```

```
<210> 679
<211> 25
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (13)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 679
Met Val Gly Arg Cys Ser Ile Leu Ser Ser Thr Pro Xaa Arg His Pro
 1               5                  10                  15

Ser Leu Ser Trp Glu Gly Leu Gly Gly
            20                  25
```

```
<210> 680
```

352

```
<211> 25
<212> PRT
<213> Homo sapiens


<400> 680
Met Val Gly Arg Cys Ser Ile Leu Ser Ser Thr Pro Gln Arg His Pro
1               5                  10                  15

Ser Leu Ser Trp Glu Gly Leu Gly Gly
            20                  25




<210> 681
<211> 18
<212> PRT
<213> Homo sapiens


<220>
<221> SITE
<222> (13)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 681
Met Gly Thr Gln Gly Cys Pro His Pro Ser Trp Leu Xaa Leu Leu Gly
1               5                  10                  15

Leu Ser




<210> 682
<211> 30
<212> PRT
<213> Homo sapiens


<400> 682
Met Gly Thr Gln Gly Cys Pro His Pro Ser Trp Leu Leu Leu Leu Gly
1               5                  10                  15

Leu Ser Trp Trp Gly Glu Gly Asp Gly Ala Val Gly Pro Cys
            20                  25                  30




<210> 683
<211> 10
<212> PRT
<213> Homo sapiens


<400> 683
Ser Leu Leu Glu Leu Gly Leu Gly Pro Leu
1               5                  10




<210> 684
<211> 206
<212> PRT
```

<213> Homo sapiens

<220>
<221> SITE
<222> (2)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (41)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 684

```
Asp Xaa Xaa Pro Gly Ala Tyr Ala Gly Phe Arg Pro Asn Ala Asn Arg
 1               5                  10                  15

Ile Ser Phe Pro Val Phe Arg Asn Asn Val Cys Pro Trp Pro Glu Ala
            20                  25                  30

Leu Arg Ser Ala Pro Lys Leu Leu Xaa Leu Asp Glu Pro Met Gly Ala
        35                  40                  45

Leu Asp Lys Lys Leu Arg Asp Arg Met Gln Leu Glu Val Val Asp Ile
    50                  55                  60

Leu Glu Arg Val Gly Val Thr Cys Val Met Val Thr His Asp Gln Glu
65                  70                  75                  80

Glu Ala Met Thr Met Ala Gly Arg Ile Ala Ile Met Asn Arg Gly Lys
            85                  90                  95

Phe Val Gln Ile Gly Glu Pro Glu Glu Ile Tyr Glu His Pro Thr Thr
            100                 105                 110

Arg Tyr Ser Ala Glu Phe Ile Gly Ser Val Asn Val Phe Glu Gly Val
        115                 120                 125

Leu Lys Glu Arg Gln Glu Asp Gly Leu Val Leu Asp Ser Pro Gly Leu
    130                 135                 140

Val His Pro Leu Lys Val Asp Ala Asp Ala Ser Val Val Asp Asn Val
145                 150                 155                 160

Pro Val His Val Ala Leu Arg Pro Glu Lys Ile Met Leu Cys Glu Glu
            165                 170                 175

Pro Pro Ala Asn Gly Cys Asn Phe Ala Val Gly Glu Val Ile His Ile
            180                 185                 190

Ala Tyr Leu Gly Asp Leu Ser Val Tyr His Val Arg Leu Lys
        195                 200                 205
```

<210> 685

```
<211> 440
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (168)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (169)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (173)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (180)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (191)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 685
Met Ala Ser Leu Val Ser Leu Glu Leu Gly Leu Leu Leu Ala Val Leu
 1               5                  10                  15

Val Val Thr Ala Thr Ala Ser Pro Pro Ala Gly Leu Leu Ser Leu Leu
            20                  25                  30

Thr Ser Gly Gln Gly Ala Leu Asp Gln Glu Ala Leu Gly Gly Leu Leu
            35                  40                  45

Asn Thr Leu Ala Asp Arg Val His Cys Ala Asn Gly Pro Cys Gly Lys
        50                  55                  60

Cys Leu Ser Val Glu Asp Ala Leu Gly Leu Gly Glu Pro Glu Gly Ser
 65                  70                  75                  80

Gly Leu Pro Pro Gly Pro Val Leu Glu Ala Arg Tyr Val Ala Arg Leu
                85                  90                  95

Ser Ala Ala Ala Val Leu Tyr Leu Ser Asn Pro Glu Gly Thr Cys Glu
                100                 105                 110

Asp Ala Arg Ala Gly Leu Trp Ala Ser His Ala Asp His Leu Leu Ala
            115                 120                 125

Leu Leu Glu Ser Pro Lys Ala Leu Thr Pro Gly Leu Ser Trp Leu Leu
        130                 135                 140

Gln Arg Met Gln Ala Arg Ala Ala Gly Gln Thr Pro Lys Thr Ala Cys
145                 150                 155                 160
```

```
Val Asp Ile Pro Gln Leu Leu Xaa Xaa Ala Val Gly Xaa Gly Ala Pro
                165             170                 175

Gly Ser Ala Xaa Gly Val Leu Ala Ala Leu Leu Asp His Val Xaa Ser
                180             185                 190

Gly Ser Cys Phe His Ala Leu Pro Ser Pro Gln Tyr Phe Val Asp Phe
            195             200             205

Val Phe Gln Gln His Ser Ser Glu Val Pro Met Thr Leu Ala Glu Leu
    210             215                 220

Ser Ala Leu Met Gln Arg Leu Gly Val Gly Arg Glu Ala His Ser Asp
225             230             235                 240

His Ser His Arg His Arg Gly Ala Ser Ser Arg Asp Pro Val Pro Leu
            245             250             255

Ile Ser Ser Ser Asn Ser Ser Ser Val Trp Asp Thr Val Cys Leu Ser
            260             265             270

Ala Arg Asp Val Met Ala Ala Tyr Gly Leu Ser Glu Gln Ala Gly Val
        275             280             285

Thr Pro Glu Ala Trp Ala Gln Leu Ser Pro Ala Leu Leu Gln Gln Gln
    290             295             300

Leu Ser Gly Ala Cys Thr Ser Gln Ser Arg Pro Pro Val Gln Asp Gln
305             310             315             320

Leu Ser Gln Ser Glu Arg Tyr Leu Tyr Gly Ser Leu Ala Thr Leu Leu
            325             330             335

Ile Cys Leu Cys Ala Val Phe Gly Leu Leu Leu Leu Thr Cys Thr Gly
            340             345             350

Cys Arg Gly Val Thr His Tyr Ile Leu Gln Thr Phe Leu Ser Leu Ala
        355             360             365

Val Gly Ala Leu Thr Gly Asp Ala Val Leu His Leu Thr Pro Lys Val
    370             375             380

Leu Gly Leu His Thr His Ser Glu Glu Gly Leu Ser Pro Gln Pro Thr
385             390             395             400

Trp Arg Leu Leu Ala Met Leu Ala Gly Leu Tyr Ala Phe Phe Leu Phe
            405             410             415

Glu Asn Leu Phe Asn Leu Leu Leu Pro Arg Asp Pro Glu Asp Leu Glu
            420             425             430

Asp Gly Pro Ala Ala Thr Ala Ala
            435             440
```

```
<210> 686
<211> 647
<212> PRT
<213> Homo sapiens
```

```
<400> 686
Met Ala Ser Leu Val Ser Leu Glu Leu Gly Leu Leu Leu Ala Val Leu
 1               5                  10                  15

Val Val Thr Ala Thr Ala Ser Pro Pro Ala Gly Leu Leu Ser Leu Leu
            20                  25                  30

Thr Ser Gly Gln Gly Ala Leu Asp Gln Glu Ala Leu Gly Gly Leu Leu
        35                  40                  45

Asn Thr Leu Ala Asp Arg Val His Cys Ala Asn Gly Pro Cys Gly Lys
    50                  55                  60

Cys Leu Ser Val Glu Asp Ala Leu Gly Leu Gly Glu Pro Glu Gly Ser
65                  70                  75                  80

Gly Leu Pro Pro Gly Pro Val Leu Glu Ala Arg Tyr Val Ala Arg Leu
            85                  90                  95

Ser Ala Ala Ala Val Leu Tyr Leu Ser Asn Pro Glu Gly Thr Cys Glu
            100                 105                 110

Asp Ala Arg Ala Gly Leu Trp Ala Ser His Ala Asp His Leu Leu Ala
        115                 120                 125

Leu Leu Glu Ser Pro Lys Ala Leu Thr Pro Gly Leu Ser Trp Leu Leu
    130                 135                 140

Gln Arg Met Gln Ala Arg Ala Ala Gly Gln Thr Pro Lys Thr Ala Cys
145             150                 155                 160

Val Asp Ile Pro Gln Leu Leu Glu Glu Ala Val Gly Ala Gly Ala Pro
            165                 170                 175

Gly Ser Ala Gly Gly Val Leu Ala Ala Leu Leu Asp His Val Arg Ser
        180                 185                 190

Gly Ser Cys Phe His Ala Leu Pro Ser Pro Gln Tyr Phe Val Asp Phe
        195                 200                 205

Val Phe Gln Gln His Ser Ser Glu Val Pro Met Thr Leu Ala Glu Leu
    210                 215                 220

Ser Ala Leu Met Gln Arg Leu Gly Val Gly Arg Glu Ala His Ser Asp
225             230                 235                 240

His Ser His Arg His Arg Gly Ala Ser Ser Arg Asp Pro Val Pro Leu
            245                 250                 255

Ile Ser Ser Ser Asn Ser Ser Ser Val Trp Asp Thr Val Cys Leu Ser
        260                 265                 270

Ala Arg Asp Val Met Ala Ala Tyr Gly Leu Ser Glu Gln Ala Gly Val
        275                 280                 285

Thr Pro Glu Ala Trp Ala Gln Leu Ser Pro Ala Leu Leu Gln Gln Gln
    290                 295                 300

Leu Ser Gly Ala Cys Thr Ser Gln Ser Arg Pro Pro Val Gln Asp Gln
                        357
```

305   310   315   320

Leu Ser Gln Ser Glu Arg Tyr Leu Tyr Gly Ser Leu Ala Thr Leu Leu
            325   330   335

Ile Cys Leu Cys Ala Val Phe Gly Leu Leu Leu Leu Thr Cys Thr Gly
            340   345   350

Cys Arg Gly Val Thr His Tyr Ile Leu Gln Thr Phe Leu Ser Leu Ala
        355   360   365

Val Gly Ala Leu Thr Gly Asp Ala Val Leu His Leu Thr Pro Lys Val
    370   375   380

Leu Gly Leu His Thr His Ser Glu Glu Gly Leu Ser Pro Gln Pro Thr
385   390   395   400

Trp Arg Leu Leu Ala Met Leu Ala Gly Leu Tyr Ala Phe Phe Leu Phe
            405   410   415

Glu Asn Leu Phe Asn Leu Leu Leu Pro Arg Asp Pro Glu Asp Leu Glu
            420   425   430

Asp Gly Pro Cys Gly His Ser Ser His Ser His Gly Gly His Ser His
        435   440   445

Gly Val Ser Leu Gln Leu Ala Pro Ser Glu Leu Arg Gln Pro Lys Pro
    450   455   460

Pro His Glu Gly Ser Arg Ala Asp Leu Val Ala Glu Glu Ser Pro Glu
465   470   475   480

Leu Leu Asn Pro Glu Pro Arg Arg Leu Ser Pro Glu Leu Arg Leu Leu
            485   490   495

Pro Tyr Met Ile Thr Leu Gly Asp Ala Val His Asn Phe Ala Asp Gly
            500   505   510

Leu Ala Val Gly Ala Ala Phe Ala Ser Ser Trp Lys Thr Gly Leu Ala
        515   520   525

Thr Ser Leu Ala Val Phe Cys His Glu Leu Pro His Glu Leu Gly Asp
    530   535   540

Phe Ala Ala Leu Leu His Ala Gly Leu Ser Val Arg Gln Ala Leu Leu
545   550   555   560

Leu Asn Leu Ala Ser Ala Leu Thr Ala Phe Ala Gly Leu Tyr Val Ala
            565   570   575

Leu Ala Val Gly Val Ser Glu Glu Ser Glu Ala Trp Ile Leu Ala Val
        580   585   590

Ala Thr Gly Leu Phe Leu Tyr Val Ala Leu Cys Asp Met Leu Pro Ala
        595   600   605

Met Leu Lys Val Arg Asp Pro Arg Pro Trp Leu Leu Phe Leu Leu His
    610   615   620

Asn Val Gly Leu Leu Gly Gly Trp Thr Val Leu Leu Leu Leu Ser Leu

625   630   635   640

Tyr Glu Asp Asp Ile Thr Phe
                    645

<210> 687
<211> 49
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (48)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 687
Ile Ser Val Ile Phe Asn Asp Thr Val Lys Lys Thr Met Gln Glu Cys
 1   5   10   15

Ser Ala Met Lys Gln Ile Phe Lys Asp Leu Phe Thr Gly Phe Leu Ser
            20   25   30

Trp Asn Ile His Leu Phe Pro Arg Cys Leu Cys Asp Ser Glu Ile Xaa
        35   40   45

Pro

<210> 688
<211> 307
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (249)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (261)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 688
Met Leu Arg Val Val Glu Gly Ile Phe Ile Phe Val Val Val Ser Glu
 1   5   10   15

Ser Val Phe Gly Val Leu Gly Asn Gly Phe Ile Gly Leu Val Asn Cys
            20   25   30

Ile Asp Cys Ala Lys Asn Lys Leu Ser Thr Ile Gly Phe Ile Leu Thr
        35   40   45

Gly Leu Ala Ile Ser Arg Ile Phe Leu Ile Trp Ile Ile Ile Thr Asp
    50   55   60

359

```
Gly Phe Ile Gln Ile Phe Ser Pro Asn Ile Tyr Ala Ser Gly Asn Leu
 65              70              75                  80

Ile Glu Tyr Ile Ser Tyr Phe Trp Val Ile Gly Asn Gln Ser Ser Met
             85              90                  95

Trp Phe Ala Thr Ser Leu Ser Ile Phe Tyr Phe Leu Lys Ile Ala Asn
             100             105             110

Phe Ser Asn Tyr Ile Phe Leu Trp Leu Lys Ser Arg Thr Asn Met Val
         115             120             125

Leu Pro Phe Met Ile Val Phe Leu Leu Ile Ser Ser Leu Leu Asn Phe
         130             135             140

Ala Tyr Ile Ala Lys Ile Leu Asn Asp Tyr Lys Met Lys Asn Asp Thr
145             150             155             160

Val Trp Asp Leu Asn Met Tyr Lys Ser Glu Tyr Phe Ile Lys Gln Ile
             165             170             175

Leu Leu Asn Leu Gly Val Ile Phe Phe Phe Thr Leu Ser Leu Ile Thr
             180             185             190

Cys Ile Phe Leu Ile Ile Ser Leu Trp Arg His Asn Arg Gln Met Gln
         195             200             205

Ser Asn Val Thr Gly Leu Arg Asp Ser Asn Thr Glu Ala His Val Lys
     210             215             220

Ala Met Lys Val Leu Ile Ser Phe Ile Ile Leu Phe Ile Leu Tyr Phe
225             230             235             240

Ile Gly Met Ala Ile Glu Ile Ser Xaa Phe Thr Val Arg Glu Asn Lys
             245             250             255

Leu Leu Leu Met Xaa Gly Met Thr Thr Thr Ala Ile Tyr Pro Trp Gly
         260             265             270

His Ser Phe Ile Leu Ile Leu Gly Asn Ser Lys Leu Lys Gln Ala Ser
         275             280             285

Leu Arg Val Leu Gln Gln Leu Lys Cys Cys Glu Lys Arg Lys Asn Leu
     290             295             300

Arg Val Thr
305
```

```
<210> 689
<211> 181
<212> PRT
<213> Homo sapiens

<400> 689
Met Val Leu Pro Phe Met Ile Val Phe Leu Leu Ile Ser Ser Leu Leu
 1           5               10              15

Asn Phe Ala Tyr Ile Ala Lys Ile Leu Asn Asp Tyr Lys Met Lys Asn
                            360
```

                    20   25   30

Asp Thr Val Trp Asp Leu Asn Met Tyr Lys Ser Glu Tyr Phe Ile Lys
        35   40   45

Gln Ile Leu Leu Asn Leu Gly Val Ile Phe Phe Phe Thr Leu Ser Leu
        50   55   60

Ile Thr Cys Ile Phe Leu Ile Ile Ser Leu Trp Arg His Asn Arg Gln
65   70   75   80

Met Gln Ser Asn Val Thr Gly Leu Arg Asp Ser Asn Thr Glu Ala His
                85   90   95

Val Lys Ala Met Lys Val Leu Ile Ser Phe Ile Ile Leu Phe Ile Leu
            100   105   110

Tyr Phe Ile Gly Met Ala Ile Glu Ile Ser Cys Phe Thr Val Arg Glu
        115   120   125

Asn Lys Leu Leu Leu Met Phe Gly Met Thr Thr Thr Ala Ile Tyr Pro
    130   135   140

Trp Gly His Ser Phe Ile Leu Ile Leu Gly Asn Ser Lys Leu Lys Gln
145   150   155   160

Ala Ser Leu Arg Val Leu Gln Gln Leu Lys Cys Cys Glu Lys Arg Lys
            165   170   175

Asn Leu Arg Val Thr
            180

<210> 690
<211> 70
<212> PRT
<213> Homo sapiens

<400> 690
Ala Ala Met Arg Arg Trp Ala Ser Ser Ser Leu Glu Gly Glu Glu Leu
1   5   10   15

Ser Thr Gln Arg Asp Leu Thr Arg Lys Val His Pro Pro Ser Thr Gln
        20   25   30

Glu Ala Pro Ala Asp Ser Met Cys Phe Arg Leu Cys Trp Pro Asn Gly
        35   40   45

Leu Cys Arg Asp Tyr Ser Ala Leu Pro Leu Trp Leu Gln Ser Asp His
        50   55   60

Arg Pro Ser Glu Ser Glu
65   70

<210> 691
<211> 88
<212> PRT

<213> Homo sapiens

<220>
<221> SITE
<222> (63)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (73)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 691
```
Met Pro Val Gly Ser Leu Pro His Pro Gly Cys Leu Trp Ala Ala Phe
 1               5                  10                  15

Leu Thr Leu Asp Ala Cys Gly Leu Pro Ser Ser Pro Trp Met Pro Val
            20              25                  30

Gly Ser Leu Pro His Pro Gly Cys Leu Trp Ala Ala Phe Leu Thr Leu
        35                  40                  45

Asp Ala Cys Gly Gln Pro Ser Ser Pro Trp Met Pro Val Gly Xaa Leu
    50                  55                  60

Leu Thr Leu Asp Ala Cys Gly Gln Xaa Ser Ser Pro Gly Cys Leu Trp
65                  70                  75                  80

Ala Ala Phe Leu Thr Trp Ser Leu
            85
```

<210> 692
<211> 190
<212> PRT
<213> Homo sapiens

<400> 692
```
Met Pro Val Gly Ser Leu Pro His Pro Gly Cys Leu Trp Ala Ala Phe
 1               5                  10                  15

Leu Thr Leu Asp Ala Cys Gly Leu Pro Ser Ser Pro Trp Met Pro Val
            20              25                  30

Gly Ser Leu Pro His Pro Gly Cys Leu Trp Ala Ala Phe Leu Thr Leu
        35                  40                  45

Asp Ala Cys Gly Gln Pro Ser Ser Pro Trp Met Pro Val Gly Cys Leu
    50                  55                  60

Pro His Pro Gly Cys Leu Trp Ala Ala Phe Leu Thr Leu Asp Ala Cys
65                  70                  75                  80

Gly Gln Pro Ser Ser Pro Trp Met Pro Val Thr Trp Phe Pro Trp Gly
            85                  90                  95

Leu Pro Lys Leu Arg Asp Pro Lys Pro Pro Ser Asn Leu Met Thr Arg
            100                 105                 110
```

```
Pro Val Ser Glu His Thr Cys Val Val Pro Glu Pro Leu Thr Asn Pro
        115                 120             125

Leu Cys Asn Pro Ala His Ala Phe Pro Ile Leu Lys Gly Pro Ala His
        130                 135             140

Arg Pro Ala His Val Phe Pro Leu Pro Leu Leu Cys Pro Tyr Leu Val
145                     150             155                 160

Gly Ser Cys Pro Phe Trp Ala Leu Val Trp His Phe Thr His Lys Cys
                165                 170             175

Val Leu Trp Val Val Ser Gly Pro Pro Pro Ala Val Arg Gly
                180                 185             190
```

```
<210> 693
<211> 38
<212> PRT
<213> Homo sapiens

<400> 693
Met Trp Leu Ser Pro Val Pro Gly Val Cys Ala Ala Val Leu Ala Leu
  1             5                 10                  15

Ser Phe Trp Ile Ala Lys Phe Pro Gly Glu Gly Thr Ala Ile Ala Lys
                20                  25                  30

Ala Leu Gly Arg Leu Lys
            35
```

```
<210> 694
<211> 38
<212> PRT
<213> Homo sapiens

<400> 694
Met Trp Leu Ser Pro Val Pro Gly Val Cys Ala Ala Val Leu Ala Leu
  1             5                 10                  15

Ser Phe Trp Ile Ala Lys Phe Pro Gly Glu Gly Thr Ala Ile Ala Lys
                20                  25                  30

Ala Leu Gly Arg Leu Lys
            35
```

```
<210> 695
<211> 26
<212> PRT
<213> Homo sapiens

<400> 695
Gly Leu Phe Leu Gly Gln Met Asn Trp Ile Phe Ser Cys Cys Phe Ser
  1             5                 10                  15
```

363

Asn Asn Val Thr Thr Thr Val Lys Lys Arg
                20   25

<210> 696
<211> 166
<212> PRT
<213> Homo sapiens

<400> 696
Met Ser Phe Thr Val Ser Met Ala Ile Gly Leu Val Leu Gly Gly Phe
  1   5   10   ,   15

Ile Trp Ala Val Phe Ile Cys Leu Ser Arg Arg Arg Arg Ala Ser Ala
                20   25   30

Pro Ile Ser Gln Trp Ser Ser Ser Arg Arg Ser Arg Ser Ser Tyr Thr
         35   40   45

His Gly Leu Asn Arg Thr Gly Phe Tyr Arg His Ser Gly Cys Glu Arg
      50   55   60

Arg Ser Asn Leu Ser Leu Ala Ser Leu Thr Phe Gln Arg Gln Ala Ser
  65   70   75   80

Leu Glu Gln Ala Asn Ser Phe Pro Arg Lys Ser Ser Phe Arg Ala Ser
                85   90   95

Thr Phe His Pro Phe Leu Gln Cys Pro Pro Leu Pro Val Glu Thr Glu
             100   105   110

Ser Gln Leu Val Thr Leu Pro Ser Ser Asn Ile Ser Pro Thr Ile Ser
      115   120   125

Thr Ser His Ser Leu Ser Arg Pro Asp Tyr Trp Ser Ser Asn Ser Leu
   130   135   140

Arg Val Gly Leu Ser Thr Pro Pro Pro Ala Tyr Glu Ser Ile Ile
145   150   155   160

Lys Ala Phe Pro Asp Ser
                165

<210> 697
<211> 166
<212> PRT
<213> Homo sapiens

<400> 697
Met Ser Phe Thr Val Ser Met Ala Ile Gly Leu Val Leu Gly Gly Phe
  1   5   10   15

Ile Trp Ala Val Phe Ile Cys Leu Ser Arg Arg Arg Arg Ala Ser Ala
                20   25   30

Pro Ile Ser Gln Trp Ser Ser Ser Arg Arg Ser Arg Ser Ser Tyr Thr
         35   40   45

```
His Gly Leu Asn Arg Thr Gly Phe Tyr Arg His Ser Gly Cys Glu Arg
    50                  55                  60

Arg Ser Asn Leu Ser Leu Ala Ser Leu Thr Phe Gln Arg Gln Ala Ser
65                  70                  75                  80

Leu Glu Gln Ala Asn Ser Phe Pro Arg Lys Ser Ser Phe Arg Ala Ser
                85                  90                  95

Thr Phe His Pro Phe Leu Gln Cys Pro Pro Leu Pro Val Glu Thr Glu
            100                 105                 110

Ser Gln Leu Val Thr Leu Pro Ser Ser Asn Ile Ser Pro Thr Ile Ser
            115                 120                 125

Thr Ser His Ser Leu Ser Arg Pro Asp Tyr Trp Ser Ser Asn Ser Leu
    130                 135                 140

Arg Val Gly Leu Ser Thr Pro Pro Pro Ala Tyr Glu Ser Ile Ile
145                 150             155                 160

Lys Ala Phe Pro Asp Ser
                165
```

```
<210> 698
<211> 61
<212> PRT
<213> Homo sapiens

<400> 698
Met Val Leu Ile Asn Ser Gly Lys Pro Gly Ser Lys Cys Cys Trp Val
    1               5                   10                  15

Phe Arg Pro Gly Leu Ser Ala Pro Cys Ser Ala Leu Trp Trp Gly Cys
                20                  25                  30

Pro Gly Leu Ala Leu Ser Leu Ser Gly Pro Gln Val Arg Leu Phe Thr
            35                  40                  45

Arg Arg Tyr Glu Thr Thr Leu Pro Asn Thr Gly Pro Trp
    50                  55                  60
```

```
<210> 699
<211> 54
<212> PRT
<213> Homo sapiens

<400> 699
Met Leu Leu Gly Leu Gln Ala Arg Leu Val Ser Ser Leu Leu Cys Ser
    1               5                   10                  15

Val Val Gly Cys Leu Gly Cys Ser Phe Phe Cys Pro Arg Arg Tyr Tyr
                20                  25                  30

Lys Lys Leu Asn Leu His Lys Ala Cys Met Glu Asn Ser Val Ser Ala
```

```
                ·  35                    40                     45


Glu Ile Arg Ser Asp Arg
      50




<210> 700
<211> 240
<212> PRT ·
<213> Homo sapiens.

<400> 700
Met Ser Arg Tyr Leu Leu Pro Leu Ser Ala Leu Gly Thr Val Ala Gly
  1                5                 10                 15

Ala Ala Val Leu Leu Lys Asp Tyr Val Thr Gly Gly Ala Cys Pro Ser
              20                25                30

Lys Ala Thr Ile Pro Gly Lys Thr Val Ile Val Thr Gly Ala Asn Thr
          35                40                 45 ·

Gly Ile Gly Lys Gln Thr Ala Leu Glu Leu Ala Arg Arg Gly Gly Asn
      50                55                60

Ile Ile Leu Ala Cys Arg Asp Met Glu Lys Cys Glu Ala Ala Ala Lys
 65               ·  70                75                    80

Asp Ile Arg Gly Glu Thr Leu Asn His His Val Asn Ala Arg His Leu
              85                90                 95

Asp Leu Ala Ser Leu Lys Ser Ile Arg Glu Phe Ala Ala Lys Ile Ile
             100               105               110

Glu Glu Glu Glu Arg Val Asp Ile Leu Ile Asn Asn Ala Gly Val Met
             115               120               125

Arg Cys Pro His Trp Thr Thr Glu Asp Gly Phe Glu Met Gln Phe Gly
      130               135               140

Val Asn His Leu Gly His Phe Leu Leu Thr Asn Leu Leu Leu Asp Lys
145               150               155               160

Leu Lys Ala Ser Ala Pro Ser Arg Ile Ile Asn Leu Ser Ser Leu Ala
              165               170               175

His Val Ala Gly His Ile Asp Phe Asp Asp Leu Asn Trp Gln Thr Arg
             ·180               185               190

Lys Tyr Asn Thr Lys Ala Ala Tyr Cys Gln Ser Lys Leu Ala Ile Val
          195               200               205

Leu Phe Thr Lys Glu Leu Ser Arg Arg Leu Gln Gly Thr Gly Ala Leu
      210               215               220

Gly Ser Ala Ser Leu Leu Leu Tyr Ser Glu Pro Arg Ala Ala Phe Pro
225               230               235               240
```

<210> 701
<211> 246
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (222)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (223)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (236)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (242)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (244)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 701
Met Gly Ala Ala Val Phe Phe Gly Cys Thr Phe Val Ala Phe Gly Pro
 1   5   10   15

Ala Phe Ala Leu Phe Leu Ile Thr Val Ala Gly Asp Pro Leu Arg Val
             20   25   30

Ile Ile Leu Val Ala Gly Ala Phe Phe Trp Leu Val Ser Leu Leu Leu
         35   40   45

Ala Ser Val Val Trp Phe Ile Leu Val His Val Thr Asp Arg Ser Asp
     50   55   60

Ala Arg Leu Gln Tyr Gly Leu Leu Ile Phe Gly Ala Ala Val Ser Val
 65   70   75   80

Leu Leu Gln Glu Val Phe Arg Phe Ala Tyr Tyr Lys Leu Leu Lys Lys
             85   90   95

Ala Asp Glu Gly Leu Ala Ser Leu Ser Glu Asp Gly Arg Ser Pro Ile
             100   105   110

Ser Ile Arg Gln Met Ala Tyr Val Ser Gly Leu Ser Phe Gly Ile Ile
         115   120   125

Ser Gly Val Phe Ser Val Ile Asn Ile Leu Ala Asp Ala Leu Gly Pro
     130   135   140

367

```
Gly Val Val Gly Ile His Gly Asp Ser Pro Tyr Tyr Phe Leu Thr Ser
145                 150             155                     160

Ala Phe Leu Thr Ala Ala Ile Ile Leu Leu His Thr Phe Trp Gly Val
                165                 170             175

Val Phe Phe Asp Ala Cys Glu Arg Arg Arg Tyr Trp Ala Leu Gly Leu
            180                 185             190

Val Val Gly Ser His Leu Leu Thr Ser Gly Leu Thr Phe Leu Asn Pro
            195                 200              205

Trp Tyr Glu Ala Ser Leu Leu Pro Ser Met Gln Ser Leu Xaa Xaa Trp
    210                 215             220

Gly Ser Gly Pro Ser Ser Gln Leu Glu Gly Pro Xaa Lys Tyr Ser Ala
225                 230             235                     240

Gln Xaa Leu Xaa Lys Asp
                245
```

```
<210> 702
<211> 5
<212> PRT
<213> Homo sapiens

<400> 702
Gly Glu Ile Phe Leu
  1             5
```

```
<210> 703
<211> 84
<212> PRT
<213> Homo sapiens

<400> 703
Lys Met His Phe Asn Lys Asn Lys Ser Ile Leu Lys Ser Phe Ser Phe
  1             5                 10                  15

Val Arg Gly Asn Met Asn Glu Ile His Ser Tyr Leu Lys Thr Glu Tyr
            20                  25                  30

Phe Thr Ala Lys Thr Leu Asn Ile Ser Arg Ala Tyr His Ile Leu Asn
            35                  40                  45

Thr Leu Trp Ser Cys Ser Tyr Phe Asn Ile Pro Gly Ser Gly Gly Gln
    50                  55                  60

Leu Ala Cys Leu Trp Leu Arg Ile Cys Phe His Ala Cys Phe Leu Ser
 65                 70                  75                  80

Phe Phe Tyr Leu
```

```
<210> 704
<211> 5
<212> PRT
<213> Homo sapiens

<400> 704
Val Leu Leu Ile Leu
 1               5



<210> 705
<211> 266
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (45)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (47)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (51)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (134)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (183)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (222)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (224)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (255)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 705
Met Pro Arg His Leu Ser Gly Leu Leu Leu Leu Leu Trp Pro Leu Leu
 1               5                  10                  15
```

```
Leu Leu Leu Pro Pro Thr Pro Ala Ala Pro Gly Pro Leu Ala Arg Pro
         20              25              30

Gly Leu Arg Arg Leu Gly Thr Arg Gly Pro Gly Gly Xaa Pro Xaa Arg
         35              40              45

Arg Pro Xaa Ser Ala Val Pro Thr Arg Ala Pro Tyr Ser Gly Ala Gly
    50              55              60

Gln Pro Gly Gly Ala Arg Gly Ala Gly Val Cys Arg Ser Arg Pro Leu
65              70              75              80

Asp Leu Val Phe Ile Ile Asp Ser Ser Arg Ser Val Arg Pro Leu Glu
             85              90              95

Phe Thr Lys Val Lys Thr Phe Val Ser Gln Ile Ile Asp Thr Leu Asp
            100             105             110

Ile Gly Ala Ala Asp Thr Arg Val Ala Val Val Asn Tyr Ala Ser Thr
        115             120             125

Val Lys Ile Glu Phe Xaa Leu Gln Thr His Ser Asp Lys Gln Ser Leu
    130             135             140

Lys Gln Ala Val Ala Arg Ile Thr Pro Leu Ser Thr Gly Thr Met Ser
145             150             155             160

Gly Leu Ala Ile Gln Thr Ala Met Asp Glu Ala Phe Thr Val Glu Ala
            165             170             175

Gly Ala Arg Gly Pro Thr Xaa Asn Ile Pro Lys Val Ala Ile Ile Val
        180             185             190

Thr Asp Gly Arg Pro Gln Asp Gln Val Asn Glu Val Ala Ala Arg Ala
    195             200             205

Arg Ala Ser Gly Ile Glu Leu Tyr Ala Val Gly Val Asp Xaa Ala Xaa
    210             215             220

Met Glu Ser Leu Gln Asp Glu Trp Pro Ala Lys Pro Leu Asp Glu His
225             230             235             240

Val Phe Tyr Val Glu Thr Tyr Gly Val Ile Glu Lys Pro Ser Xaa Arg
            245             250             255

Phe Gln Glu Thr Leu Leu Arg Ser Trp Asn
            260             265
```

```
<210> 706
<211> 484
<212> PRT
<213> Homo sapiens

<400> 706
Met Pro Arg His Leu Ser Gly Leu Leu Leu Leu Leu Trp Pro Leu Leu
1               5               10              15
```

Leu Leu Leu Pro Pro Thr Pro Ala Ala Pro Gly Pro Leu Ala Arg Pro
            20   25   30

Gly Leu Arg Arg Leu Gly Thr Arg Gly Pro Gly Gly Ser Pro Gly Arg
        35   40   45

Arg Pro Gly Ser Ala Val Pro Thr Arg Ala Pro Tyr Ser Gly Ala Gly
    50   55   60

Gln Pro Gly Gly Ala Arg Gly Ala Gly Val Cys Arg Ser Arg Pro Leu
65   70   75   80

Asp Leu Val Phe Ile Ile Asp Ser Ser Arg Ser Val Arg Pro Leu Glu
            85   90   95

Phe Thr Lys Val Lys Thr Phe Val Ser Gln Ile Ile Asp Thr Leu Asp
            100   105   110

Ile Gly Ala Ala Asp Thr Arg Val Ala Val Val Asn Tyr Ala Ser Thr
        115   120   125

Val Lys Ile Glu Phe His Leu Gln Thr His Ser Asp Lys Gln Ser Leu
    130   135   140

Lys Gln Ala Val Ala Arg Ile Thr Pro Leu Ser Thr Gly Thr Met Ser
145   150   155   160

Gly Leu Ala Ile Gln Thr Ala Met Asp Glu Ala Phe Thr Val Glu Ala
            165   170   175

Gly Ala Arg Gly Pro Thr Ser Asn Ile Pro Lys Val Ala Ile Ile Val
            180   185   190

Thr Asp Gly Arg Pro Gln Asp Gln Val Asn Glu Val Ala Ala Arg Ala
        195   200   205

Arg Ala Ser Gly Ile Glu Leu Tyr Ala Val Gly Val Asp Arg Ala Asp
    210   215   220

Met Glu Ser Leu Lys Met Met Ala Ser Glu Pro Leu Asp Glu His Val
225   230   235   240

Phe Tyr Val Glu Thr Tyr Gly Val Ile Glu Lys Leu Ser Ser Arg Phe
            245   250   255

Gln Glu Thr Phe Cys Ala Leu Asp Pro Cys Val Leu Gly Thr His Arg
        260   265   270

Cys Gln His Val Cys Val Ser Asp Gly Glu Gly Lys His His Cys Glu
        275   280   285

Cys Ser Gln Gly Tyr Ser Leu Asn Ala Asp Gln Lys Thr Cys Ser Ala
    290   295   300

Ile Asp Lys Cys Ala Leu Asn Thr His Gly Cys Glu His Ile Cys Val
305   310   315   320

Asn Asp Arg Thr Gly Ser Tyr His Cys Glu Cys Tyr Glu Gly Tyr Thr
        325   330   335

```
Leu Asn Gln Asp Arg Lys Thr Cys Ser Ala Gln Asp Gln Cys Ala Phe
        340             345             350

Gly Thr His Gly Cys Gln His Ile Cys Val Asn Asp Arg Asp Gly Ser
        355             360             365

His His Cys Glu Cys Tyr Glu Gly Tyr Thr Leu Asn Ala Asp Asn Lys
    370             375             380

Thr Cys Ser Val Arg Ser Glu Cys Ala Gly Gly Ser His Gly Cys Gln
385             390             395             400

His Leu Cys Val Asp Asp Gly Pro Ala Ala Tyr His Cys Asp Cys Phe
        405             410             415

Pro Gly Tyr Thr Leu Thr Glu Asp Arg Arg Thr Cys Ala Ala Ile Glu
        420             425             430

Glu Ala Arg Arg Leu Val Ser Thr Glu Asp Ala Cys Gly Cys Glu Ala
        435             440             445

Thr Leu Ala Phe Gln Glu Arg Ala Ser Ser Tyr Leu Gln Arg Leu Asn
    450             455             460

Ala Lys Leu Asp Asp Ile Leu Gly Lys Leu Gln Ala Asp Ala Tyr Gly
465             470             475             480

Gln Ile His Arg
```

```
<210> 707
<211> 368
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (310)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (365)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 707
Met Gln Pro Ser Ser Leu Leu Pro Leu Ala Leu Cys Leu Leu Ala Ala
  1             5              10              15

Pro Ala Ser Ala Leu Val Arg Ile Pro Leu His Lys Phe Thr Ser Ile
            20              25              30

Arg Arg Thr Met Ser Glu Val Gly Gly Ser Val Glu Asp Leu Ile Ala
        35              40              45

Lys Gly Pro Val Ser Lys Tyr Ser Gln Ala Val Pro Ala Val Thr Glu
    50              55              60
```

372

```
Gly Pro Ile Pro Glu Val Leu Lys Asn Tyr Met Asp Ala Gln Tyr Tyr
65              70              75              80

Gly Glu Ile Gly Ile Gly Thr Pro Pro Gln Cys Phe Thr Val Val Phe
            85              90              95

Asp Thr Gly Ser Ser Asn Leu Trp Val Pro Ser Ile His Cys Lys Leu
        100             105             110

Leu Asp Ile Ala Cys Trp Ile His His Lys Tyr Asn Ser Asp Lys Ser
        115             120             125

Ser Thr Tyr Val Lys Asn Gly Thr Ser Phe Asp Ile His Tyr Gly Ser
    130             135             140

Gly Ser Leu Ser Gly Tyr Leu Ser Gln Asp Thr Val Ser Val Pro Cys
145             150             155             160

Gln Ser Ala Ser Ser Ala Ser Ala Leu Gly Gly Val Lys Val Glu Arg
            165             170             175

Gln Val Phe Gly Glu Ala Thr Lys Gln Pro Gly Ile Thr Phe Ile Ala
        180             185             190

Ala Lys Phe Asp Gly Ile Leu Gly Met Ala Tyr Pro Arg Ile Ser Val
        195             200             205

Asn Asn Val Leu Pro Val Phe Asp Asn Leu Met Gln Gln Lys Leu Val
    210             215             220

Asp Gln Asn Ile Phe Ser Phe Tyr Leu Ser Arg Asp Pro Asp Ala Gln
225             230             235             240

Pro Gly Gly Glu Leu Met Leu Gly Gly Thr Asp Ser Lys Tyr Tyr Lys
            245             250             255

Gly Ser Leu Ser Tyr Leu Asn Val Thr Arg Lys Ala Tyr Trp Gln Val
            260             265             270

His Leu Asp Gln Val Glu Val Ala Ser Gly Leu Thr Leu Cys Lys Glu
        275             280             285

Gly Cys Glu Ala Ile Val Asp Thr Gly Thr Ser Leu Met Val Gly Pro
    290             295             300

Val Asp Glu Val Arg Xaa Leu Gln Lys Ala Ile Gly Ala Val Pro Leu
305             310             315             320

Ile Gln Gly Glu Tyr Met Ile Pro Cys Glu Lys Val Ser Thr Leu Pro
            325             330             335

Ala Ile Thr Leu Lys Leu Gly Gly Lys Gly Tyr Lys Leu Ser Pro Glu
        340             345             350

Asp Tyr Thr Leu Lys Val Ser Gln Ala Gly Lys Thr Xaa Cys Leu Ser
    355             360             365
```

```
<210> 708
<211> 92
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (43)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (69)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (70)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 708
Leu Val Val Leu Gly Val Cys Ala Ala Gln His Glu Leu Thr Pro Arg
 1               5                  10                  15

Leu Arg Ala Gly Val Pro Val Gln Val Glu Arg Glu Asp Val Leu Leu
            20                  25                  30

His Gln Leu Leu Leu His Gln Val Ile Lys Xaa Gly Lys His Ile Val
        35                  40                  45

Asp Arg Asp Ala Gly Val Gly His Ala Gln Asp Ala Val Glu Leu Gly
    50                  55                  60

Arg Asp Glu Gly Xaa Xaa Arg Leu Leu Gly Gly Phe Pro Glu Arg Leu
 65                  70                  75                  80

Pro Leu His Leu Asp Ala Ser Gln Ala Arg Gln Thr
            85                  90
```

```
<210> 709
<211> 115
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (50)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (70)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
```

<222> (86)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (100)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 709
Met Gln Pro Pro Ser Leu Leu Leu Leu Val Leu Gly Leu Leu Ala Ala
1   5   10   15

Pro Ala Ala Ala Leu Val Arg Ile Pro Leu His Lys Phe Thr Ser Val
            20   25   30

Arg Arg Thr Met Ser Glu Leu Gly Gly Pro Val Glu Asp Leu Ile Ala
        35   40   45

Arg Xaa Pro Ile Ser Lys Tyr Ala Gln Gly Val Pro Ser Val Ala Gly
    50   55   60

Gly Pro Val Pro Glu Xaa Leu Lys Glu Thr Thr Trp Asn Ala Gln Ile
65   70   75   80

Leu Arg Gly Lys Phe Xaa His Pro Gly Thr Pro Pro Arg Lys Leu Leu
                85   90   95

Pro Pro Val Xaa Pro Phe Glu Lys Arg Gly Ser Phe Pro Thr Leu Leu
                100   105   110

Gly Ser Pro
        115

<210> 710
<211> 410
<212> PRT
<213> Homo sapiens

<400> 710
Met Gln Pro Pro Ser Leu Leu Leu Leu Val Leu Gly Leu Leu Ala Ala
1   5   10   15

Pro Ala Ala Ala Leu Val Arg Ile Pro Leu His Lys Phe Thr Ser Val
            20   25   30

Arg Arg Thr Met Ser Glu Leu Gly Gly Pro Val Glu Asp Leu Ile Ala
        35   40   45

Arg Gly Pro Ile Ser Lys Tyr Ala Gln Gly Val Pro Ser Val Ala Gly
    50   55   60

Gly Pro Val Pro Glu Val Leu Arg Asn Tyr Met Asp Ala Gln Tyr Tyr
65   70   75   80

Gly Glu Ile Gly Ile Gly Thr Pro Pro Gln Cys Phe Thr Val Val Phe
                85   90   95

Asp Thr Gly Ser Ser Asn Leu Trp Val Pro Ser Ile His Cys Lys Leu

375

                        100   105   110

        Leu Asp Ile Ala Cys Trp Ile His His Lys Tyr Asn Ser Gly Lys Ser
                115   120   125

        Ser Thr Tyr Val Lys Asn Gly Thr Ser Phe Asp Ile His Tyr Gly Ser
                130   135   140

        Gly Ser Leu Ser Gly Tyr Leu Ser Gln Asp Thr Val Ser Val Pro Cys
        145   150   155   160

        Lys Ser Gly Leu Ser Ser Leu Ala Gly Val Lys Val Glu Arg Gln Thr
                                165   170   175

        Phe Gly Glu Ala Thr Lys Gln Pro Gly Ile Thr Phe Ile Ala Ala Lys
                                180   185   190

        Phe Asp Gly Ile Leu Gly Met Ala Tyr Pro Arg Ile Ser Val Asn Asn
                        195   200   205

        Val Leu Pro Val Phe Asp Asn Leu Met Gln Gln Lys Leu Val Glu Lys
                210   215   220

        Asn Ile Phe Ser Phe Tyr Leu Asn Arg Asp Pro Gly Ala Gln Pro Gly
        225   230   235   240

        Gly Glu Leu Met Leu Gly Gly Thr Asp Ser Lys Tyr Tyr Lys Gly Pro
                                245   250   255

        Leu Ser Tyr Leu Asn Val Thr Arg Lys Ala Tyr Trp Gln Val His Met
                        260   265   270

        Glu Gln Val Asp Val Gly Ser Ser Leu Thr Leu Cys Lys Gly Gly Cys
                        275   280   285

        Glu Ala Ile Val Asp Thr Gly Thr Ser Leu Ile Val Gly Pro Val Asp
                290   295   300

        Glu Val Arg Glu Leu Gln Lys Ala Ile Gly Ala Val Pro Leu Ile Gln
        305   310   315   320

        Gly Glu Tyr Met Ile Pro Cys Glu Lys Val Ser Thr Leu Pro Glu Val
                                325   330   335

        Thr Leu Thr Leu Gly Gly Lys Pro Tyr Lys Leu Ser Ser Glu Asp Tyr
                        340   345   350

        Thr Leu Lys Val Ser Gln Gly Gly Lys Ser Ile Cys Leu Ser Gly Phe
                        355   360   365

        Met Gly Met Asp Ile Pro Pro Pro Gly Gly Pro Leu Trp Ile Leu Gly
                370   375   380

        Asp Val Phe Ile Gly Arg Tyr Tyr Thr Val Phe Asp Arg Asp Gln Asn
        385   390   395   400

        Arg Val Gly Leu Ala Glu Ala Thr Arg Leu
                                405   410

                                         376

<210> 711
<211> 96
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (25)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (77)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (79)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 711
Ala Ala Arg Glu Gly Ala Pro Pro Pro Cys Pro Thr Ser Ala Ile Gly
 1   5   10   15

Arg Ala Ser Leu Ser Leu Arg Asp Xaa Gly Arg Gly Leu Arg Asp Ala
            20   25   30

Arg Arg Glu Lys Arg Arg Gly Val Arg Gly Gln Asp Gly Gly Asp Tyr
        35   40   45

Gly Trp Cys Gly Pro Ala Arg Gly Arg Gly Val Ala Ala Lys Gly Thr
     50   55   60

Ala Glu Gly Pro Thr Gly Glu Asn Arg Ala Gln Gly Xaa Lys Xaa Gly
 65   70   75   80

Val Arg Val Ala Val Glu Ala Ser Ser Val Arg Gly Pro Gly Arg Ala
                85   90   95

<210> 712
<211> 453
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (432)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 712
Met Arg Met Ala Ser Ile Met Val Trp Val Met Ile Ile Met Val Ile
 1   5   10   15

Leu Val Leu Gly Tyr Gly Ile Phe His Cys Tyr Met Glu Tyr Ser Arg

                    20   25   30

Leu Arg Gly Glu Ala Gly Ser Asp Val Ser Leu Val Asp Leu Gly Phe
         35   40   45

Gln Thr Asp Phe Arg Val Tyr Leu His Leu Arg Gln Thr Trp Leu Ala
         50   55   60

Phe Met Ile Ile Leu Ser Ile Leu Glu Val Ile Ile Ile Leu Leu Leu
65   70   75   80

Ile Phe Leu Arg Lys Arg Ile Leu Ile Ala Ile Ala Leu Ile Lys Glu
                  85   90   95

Ala Ser Arg Ala Val Gly Tyr Val Met Cys Ser Leu Leu Tyr Pro Leu
             100   105   110

Val Thr Phe Phe Leu Leu Cys Leu Cys Ile Ala Tyr Trp Ala Ser Thr
         115   120   125

Ala Val Phe Leu Ser Thr Ser Asn Glu Ala Val Tyr Lys Ile Phe Asp
    130   135   140

Asp Ser Pro Cys Pro Phe Thr Ala Lys Thr Cys Asn Pro Glu Thr Phe
145   150   155   160

Pro Ser Ser Asn Glu Ser Arg Gln Cys Pro Asn Ala Arg Cys Gln Phe
             165   170   175

Ala Phe Tyr Gly Gly Glu Ser Gly Tyr His Arg Ala Leu Leu Gly Leu
         180   185   190

Gln Ile Phe Asn Ala Phe Met Phe Phe Trp Leu Ala Asn Phe Val Leu
         195   200   205

Ala Leu Gly Gln Val Thr Leu Ala Gly Ala Phe Ala Ser Tyr Tyr Trp
    210   215   220

Ala Leu Arg Lys Pro Asp Asp Leu Pro Ala Phe Pro Leu Phe Ser Ala
225   230   235   240

Phe Gly Arg Ala Leu Arg Tyr His Thr Gly Ser Leu Ala Phe Gly Ala
             245   250   255

Leu Ile Leu Ala Ile Val Gln Ile Ile Arg Val Ile Leu Glu Tyr Leu
         260   265   270

Asp Gln Arg Leu Lys Ala Ala Glu Asn Lys Phe Ala Lys Cys Leu Met
         275   280   285

Thr Cys Leu Lys Cys Cys Phe Trp Cys Leu Glu Lys Phe Ile Lys Phe
    290   295   300

Leu Asn Arg Asn Ala Tyr Ile Met Ile Ala Ile Tyr Gly Thr Asn Phe
305   310   315   320

Cys Thr Ser Ala Arg Asn Ala Phe Phe Leu Leu Met Arg Asn Ile Ile
             325   330   335

Arg Val Ala Val Leu Asp Lys Val Thr Asp Phe Leu Phe Leu Leu Gly

                              378

```
              340'                    345                    350
Lys Leu Leu Ile Val Gly Ser Val Gly Ile Leu Ala Phe Phe Phe Phe
        355                    360                    365

Thr His Arg Ile Arg Ile Val Gln Asp Thr Ala Pro Pro Leu Asn Tyr
    370                    375                    380

Tyr Trp Val Pro Ile Leu Thr Val Ile Val Gly Ser Tyr Leu Ile Ala
385                    390                    395                    400

His Gly Phe Phe Ser Val Tyr Gly Met Cys Val Asp Thr Leu Phe Leu
            405                    410                    415

Cys Phe Leu Glu Asp Leu Glu Arg Asn Asp Gly Ser Ala Glu Arg Xaa
        420                    425                    430

Tyr Phe Met Ser Ser Thr Leu Lys Lys Leu Leu Asn Lys Thr Asn Lys
        435                    440                    445

Lys Ala Ala Glu Ser
    450
```

```
<210> 713
<211> 453
<212> PRT
<213> Homo sapiens

<400> 713
Met Arg Met Ala Ser Ile Met Val Trp Val Met Ile Ile Met Val Ile
 1               5                   10                  15

Leu Val Leu Gly Tyr Gly Ile Phe His Cys Tyr Met Glu Tyr Ser Arg
            20                  25                  30

Leu Arg Gly Glu Ala Gly Ser Asp Val Ser Leu Val Asp Leu Gly Phe
        35                  40                  45

Gln Thr Asp Phe Arg Val Tyr Leu His Leu Arg Gln Thr Trp Leu Ala
    50                  55                  60

Phe Met Ile Ile Leu Ser Ile Leu Glu Val Ile Ile Ile Leu Leu Leu
 65              70                  75                  80

Ile Phe Leu Arg Lys Arg Ile Leu Ile Ala Ile Ala Leu Ile Lys Glu
            85                  90                  95

Ala Ser Arg Ala Val Gly Tyr Val Met Cys Ser Leu Leu Tyr Pro Leu
            100                 105                 110

Val Thr Phe Phe Leu Leu Cys Leu Cys Ile Ala Tyr Trp Ala Ser Thr
        115                 120                 125

Ala Val Phe Leu Ser Thr Ser Asn Glu Ala Val Tyr Lys Ile Phe Asp
        130                 135                 140

Asp Ser Pro Cys Pro Phe Thr Ala Lys Thr Cys Asn Pro Glu Thr Phe
145                 150                 155                 160
```

```
Pro Ser Ser Asn Glu Ser Arg Gln Cys Pro Asn Ala Arg Cys Gln Phe
             165             170             175

Ala Phe Tyr Gly Gly Glu Ser Gly Tyr His Arg Ala Leu Leu Gly Leu
             180             185             190

Gln Ile Phe Asn Ala Phe Met Phe Phe Trp Leu Ala Asn Phe Val Leu
             195             200             205

Ala Leu Gly Gln Val Thr Leu Ala Gly Ala Phe Ala Ser Tyr Tyr Trp
    210             215             220

Ala Leu Arg Lys Pro Asp Asp Leu Pro Ala Phe Pro Leu Phe Ser Ala
225             230             235             240

Phe Gly Arg Ala Leu Arg Tyr His Thr Gly Ser Leu Ala Phe Gly Ala
             245             250             255

Leu Ile Leu Ala Ile Val Gln Ile Ile Arg Val Ile Leu Glu Tyr Leu
             260             265             270

Asp Gln Arg Leu Lys Ala Ala Glu Asn Lys Phe Ala Lys Cys Leu Met
    275             280             285

Thr Cys Leu Lys Cys Cys Phe Trp Cys Leu Glu Lys Phe Ile Lys Phe
    290             295             300

Leu Asn Arg Asn Ala Tyr Ile Met Ile Ala Ile Tyr Gly Thr Asn Phe
305             310             315             320

Cys Thr Ser Ala Arg Asn Ala Phe Phe Leu Leu Met Arg Asn Ile Ile
             325             330             335

Arg Val Ala Val Leu Asp Lys Val Thr Asp Phe Leu Phe Leu Leu Gly
             340             345             350

Lys Leu Leu Ile Val Gly Ser Val Gly Ile Leu Ala Phe Phe Phe Phe
        355             360             365

Thr His Arg Ile Arg Ile Val Gln Asp Thr Ala Pro Pro Leu Asn Tyr
    370             375             380

Tyr Trp Val Pro Ile Leu Thr Val Ile Val Gly Ser Tyr Leu Ile Ala
385             390             395             400

His Gly Phe Phe Ser Val Tyr Gly Met Cys Val Asp Thr Leu Phe Leu
             405             410             415

Cys Phe Leu Glu Asp Leu Glu Arg Asn Asp Gly Ser Ala Glu Arg Pro
             420             425             430

Tyr Phe Met Ser Ser Thr Leu Lys Lys Leu Leu Asn Lys Thr Asn Lys
             435             440             445

Lys Ala Ala Glu Ser
    450
```

```
<210> 714
<211> 84
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (56)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 714
Gly Arg Pro Thr Arg Pro Leu Ser Ala Gln Asn Ala Ser Val Asn Phe
 1               5                  10                  15

Trp Glu Ala Ser Thr Leu Ala Ala Gln Arg Glu Leu Ala Met Gln Phe
            20                  25                  30

Leu Cys Pro Gly Asn His Cys Phe Pro Cys His Leu Leu Cys Ala Gln
        35                  40                      45

Lys Arg Tyr Asn Ser His Gln Xaa Thr Pro Val Val Thr Ala His Leu
    50                  55                  60

Val Cys Cys Val Phe Gln Gln Ser Val Leu Leu Gly Val Gln Leu Asn
65                  70                  75                  80

Arg Leu Gly Val
```

```
<210> 715
<211> 32
<212> PRT
<213> Homo sapiens

<400> 715
Met Trp Trp Ala Leu Leu Ala Cys Arg Phe Cys Cys Pro Arg Arg Cys
 1               5                  10                  15

Ala Ser Ala Trp Gln Gly Leu Pro Arg Arg Gly Ala Leu Phe Ser Gly
            20                  25                  30
```

```
<210> 716
<211> 53
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (26)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 716
Met Trp Trp Ala Leu Leu Ala Leu Pro Phe Leu Leu Pro Thr Ala Leu
```

```
        1            5                   10                    15

      Arg Leu Cys Leu Ala Gly Leu Pro His Xaa Phe Arg His Thr Asn Arg
                  20                  25                  30

      Met Val Pro Gln Trp His Gln Ser Gly Asp Arg Pro Leu His Ser His
                  35                  40                  45

      Pro His Ser Arg Phe
              50
```

<210> 717
<211> 744
<212> PRT
<213> Homo sapiens

<400> 717

```
      Met Trp Trp Ala Leu Leu Ala Leu Pro Phe Leu Leu Pro Thr Ala Leu
       1            5                   10                    15

      Arg Leu Cys Leu Ala Gly Pro Pro Pro Glu Arg Gly Pro Leu Phe Trp
                  20                  25                  30

      Leu Thr Arg Gln Asp Ser Arg Glu Ser Gly Ala Ala Asn Ala Thr Val
                  35                  40                  45

      Ser Pro Cys Glu Gly Leu Pro Ser Ala Gly Ala Ser Thr Leu Thr Leu
              50                  55                  60

      Ala Asn Arg Ser Leu Glu Arg Leu Pro Asn Cys Leu Pro Pro Ala Leu
      65                  70                  75                    80

      Arg Ser Leu Asp Ala Ser His Asn Leu Leu Arg Ala Leu Ser Ala Pro
                  85                  90                  95

      Glu Leu Gly Ala Leu Pro Arg Leu Gln Ala Leu Thr Leu Arg His Asn
                  100                 105                 110

      Arg Ile Ala Glu Leu Arg Trp Gly Pro Gly Gly Pro Ala Ala Leu His
                  115                 120                 125

      Thr Leu Asp Leu Ser Tyr Asn Gln Leu Ala Thr Leu Pro Pro Cys Ala
              130                 135                 140

      Gly Pro Ala Leu Pro Gly Leu Arg Ser Leu Ala Leu Ala Gly Asn Pro
      145                 150                 155                 160

      Leu Gln Ala Leu Gln Pro Gly Ala Phe Ala Cys Leu Pro Ala Leu Arg
                  165                 170                 175

      Leu Leu Asn Leu Ser Gly Thr Ala Leu Gly Arg Asp Leu Gly Ala Gly
                  180                 185                 190

      Ile Ala Asp Gly Ala Phe Ala Gly Ala Gly Gly Ala Leu Glu Val Leu
                  195                 200                 205

      Asp Leu Ser Gly Thr Phe Leu Glu Arg Val Arg Ser Gly Trp Ile Arg
              210                 215                 220
```

```
Asp Leu Pro Lys Leu Thr Ser Leu His Leu Arg Lys Met Pro Arg Leu
225             230             235             240

Arg Ile Leu Glu Ala Ala Val Phe Lys Met Thr Pro Asn Leu Gln Gln
            245             250             255

Leu Asp Cys Gln Asp Ser Ser Ala Leu Thr Ser Val His Thr Gln Leu
            260             265             270

Phe Gln Asp Thr Pro Arg Leu Gln Val Leu Leu Phe Gln Asn Cys Asn
        275             280             285

Leu Ser Ser Phe Pro Pro Trp Ser Leu His Ser Ser Gln Val Leu Ser
    290             295             300

Ile Ser Leu Phe Gly Asn Pro Leu Ile Cys Ser Cys Glu Leu Ser Trp
305             310             315             320

Leu Leu Arg Asp Ala Lys Arg Thr Val Leu Ser Arg Ala Ala Asp Thr
            325             330             335

Val Cys Val Pro Ala Ser Gly Ser Arg Asp Thr Phe Ser Ala Pro Leu
            340             345             350

Ser Leu Ser Gln Leu Pro Thr Val Cys His Leu Asp Gln Ser Thr Thr
    355             360             365

Leu His Ser Ser Ser Pro Gln Ala Val Pro Phe Thr His Gln Pro Ser
    370             375             380

Thr Gln Gly Leu Thr Thr Pro Trp Ser Thr Ala Pro Ser Thr Arg Pro
385             390             395             400

Val Glu Ala Glu Gln Ser Val Thr Lys Pro Leu Ser Phe Pro Thr Asp
            405             410             415

Ser Ala Thr Gln Thr Ala Trp Ser His Ser Gly Ile Lys Val Gly Thr
            420             425             430

Ala Arg Ser Thr Ala Ile Pro Thr Ala Asp Ser Ser Thr Ser Ser Ala
        435             440             445

Pro Arg Arg Ala Ala Asn Thr Ala Gly Ala Glu His Gln Glu His Ala
    450             455             460

Pro Met Leu Val His Ala Pro His Val Ser Ala Ala Ser Thr Pro Ser
465             470             475             480

Ala Ser Lys His Pro Gly Leu Phe Pro Thr Pro Trp Ser Gln Val Arg
            485             490             495

Thr Pro Gln Pro Asp Tyr Arg Ala Gln Ala Thr Leu Gln Ala Pro His
        500             505             510

Pro Ser Pro Ser Glu Gly Ala Ile Pro Val Leu Leu Leu Asp Glu Ser
    515             520             525

Ser Glu Glu Glu Glu Glu Gly Gln Lys Glu Glu Val Gly Ala Pro Pro
    530             535             540
```

                                        383

Gln Asp Val Pro Cys Asp Tyr His Pro Cys Lys His Leu Gln Thr Pro
545   550   555   560

Cys Ala Glu Leu Gln Arg Arg Ser Arg Cys Arg Cys Pro Gly Leu Ser
                565   570   575

Gly Glu Asp Ser Leu Pro Asp Pro Pro Arg Leu Gln Ala Val Thr Glu
            580   585   590

Thr Thr Asp Thr Ser Ala Leu Val Arg Trp Cys Ala Pro Asn Ser Val
        595   600   605

Val His Gly Tyr Gln Ile His Tyr Ser Pro Glu Gly Trp Ala Glu Asn
    610   615   620

Gln Ser Val Thr Val Val Ala Asp Ile Tyr Ala Thr Ala Arg Gln His
625   630   635   640

Pro Leu Tyr Gly Leu Ser Pro Gly Thr Met Tyr Arg Val Cys Val Leu
            645   650   655

Ala Ala Asn Arg Ala Gly Leu Ser Gln Pro Val Gln Ala Ser Gly Trp
            660   665   670

Thr Arg Ala Cys Ala Ala Phe Thr Thr Lys Pro Ser Phe Val Leu Val
        675   680   685

Phe Ala Gly Leu Cys Ala Ala Cys Gly Leu Leu Leu Val Thr Thr Leu
    690   695   700

Leu Leu Ala Ala Cys Leu Cys Arg Arg Ser Arg Thr Val Arg Leu Gln
705   710   715   720

Arg Tyr Asn Thr His Leu Val Ala Tyr Lys Asn Pro Ala Phe Asp Tyr
            725   730   735

Pro Leu Lys Leu Gln Thr Leu Ser
            740

<210> 718
<211> 153
<212> PRT
<213> Homo sapiens

<400> 718
Ala Ile His Phe Thr Gln Gln Asp Met Pro Gln Ile Arg Arg Gln Ile
  1   5   10   15

Tyr Lys Glu Leu Cys His Ala Asn Ser Leu Cys Glu Arg Arg Ile Pro
            20   25   30

Gly Leu Lys Pro Met Val Lys Gly Met Gly Thr Trp Gly Thr Leu Pro
        35   40   45

Ser Arg Glu Thr Pro Val Pro Leu Leu Pro Leu Pro Leu Pro Val Pro
        50   55   60

384

Tyr Gly Phe Ser Tyr Leu Asn Val Leu Ile Asp Phe Cys Ile Phe Phe
65   70   75   80

Ser Leu Arg Glu Tyr Leu Leu Ile Phe Asp Val Gln Gly Val Ala Met
                85   90   95

Glu Gln Pro Leu Leu Pro Leu Leu Gly Arg Ser Leu Ala Leu Trp Pro
            100   105   110

Gly Trp Gly Gly His Pro Pro Ser Arg Val Gln Gly Arg Gly Gln Glu
        115   120   125

His Leu Cys Trp Gly Gly Gly Arg Ala Lys Gly Val Cys Leu Pro Asp
    130   135   140

Ile Gln Thr Leu Phe Tyr Thr Tyr Ile
145   150

<210> 719
<211> 46
<212> PRT
<213> Homo sapiens

<400> 719
Met Arg Met Lys Met Arg Lys Arg Lys Trp Gln Leu Gly Gly Cys Pro
1   5   10   15

Pro Asp Gly Val Ser Trp Glu Leu Pro Ser Gly Leu Val Leu Pro Ala
            20   25   30

Leu Leu Ile Glu Lys Pro Ala Pro Ser Ala Ala Ala Glu Pro
        35   40   45

<210> 720
<211> 99
<212> PRT
<213> Homo sapiens

<400> 720
Gly Val Ser Trp Glu Gly Thr Pro Met Ser Pro Phe Pro Phe Met Gly
1   5   10   15

Leu Gly Ser Gly Val Arg Gly Ser His Ser Glu Phe Ala Val Thr Gln
            20   25   30

Leu Leu Val Asp Leu Pro Thr Lys Phe Gly His Val Leu Leu Gly Glu
        35   40   45

Ala Glu Trp Leu Arg Gln Gly Gln Met Leu Ala Val Leu Gln His Lys
    50   55   60

Ser Thr Thr Val Thr Val Ile Ile Leu Pro Gly His Ile His Phe Glu
65   70   75   80

Val Thr Phe Pro Ala Leu Val Glu Ile Gln Ser Val Phe Leu Tyr Arg
                85   90   95

385

Leu Cys Leu

<210> 721
<211> 90
<212> PRT
<213> Homo sapiens

<400> 721
Met Asp Tyr Gly Gly Leu Gln Ser Leu Leu Trp Thr Leu Thr Leu Ala
1   5   10   15

Ser Ser Pro Val Leu Phe Pro Met Ala Leu Gly Asp Pro Pro Gly Gln
            20   25   30

Lys Gly Ser Gly Val Trp His Pro Leu Met Pro Ala Ser Ser Ser Ala
        35   40   45

Met Cys Ala Ala Ser Gly Thr Met Trp Pro Arg Ser Tyr Phe Arg Ala
    50   55   60

Gln Ile Trp Ala Pro Gln Lys Arg Gln Ser Gly Pro Gly Arg Lys Pro
65   70   75   80

Ala Ser Thr Ala Pro Cys Gly Arg Ser Met
                85   90

<210> 722
<211> 288
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (10)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (15)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (268)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (271)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (273)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (274)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (276)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (286)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 722
Phe Ser Ser Ser Ala Cys Pro Ser Val Xaa Ser Leu Phe Val Xaa Leu
 1   5   10   15

Gly Lys Asn Pro His Asp Ala Gln Gly His Pro Arg Ala Ser Glu Asp
            20   25   30

Gln Pro Ser Ser Gly Lys Pro Val Thr Ser Tyr Pro Gly Glu Cys Gly
        35   40   45

Phe Val Phe Thr Lys Glu Ala Ser Leu Glu Ile Arg Asp Met Leu Leu
    50   55   60

Ala Asn Lys Val Pro Ala Ala Ala Arg Ala Gly Ala Ile Ala Pro Cys
65   70   75   80

Glu Val Thr Val Pro Ala Gln Asn Thr Gly Leu Gly Pro Glu Lys Thr
            85   90   95

Ser Phe Phe Gln Ala Leu Gly Ile Thr Thr Lys Ile Ser Arg Gly Thr
        100   105   110

Ile Glu Ile Leu Ser Asp Val Gln Leu Ile Lys Thr Gly Asp Lys Val
        115   120   125

Gly Ala Ser Glu Ala Thr Leu Leu Asn Met Leu Asn Ile Ser Pro Phe
    130   135   140

Ser Phe Gly Leu Ile Ile Gln Gln Val Phe Asp Asn Gly Ser Ile Tyr
145   150   155   160

Asn Pro Glu Val Leu Asp Ile Thr Glu Glu Thr Leu His Ser Arg Phe
            165   170   175

Leu Glu Gly Val Arg Asn Val Ala Ser Val Cys Leu Gln Ile Gly Tyr
            180   185   190

Pro Thr Val Ala Ser Val Pro His Ser Ile Ile Asn Gly Tyr Lys Arg
        195   200   205

Val Leu Ala Leu Ser Val Glu Thr Asp Tyr Thr Phe Pro Leu Ala Glu
    210   215   220

387

```
Lys Val Lys Ala Phe Leu Ala Asp Pro Ser Ala Phe Val Ala Ala Ala
225             230             235             240

Pro Val Ala Ala Ala Thr Thr Ala Ala Pro Ala Ala Ala Ala Ala Pro
            245             250             255

Ala Lys Val Glu Ala Lys Glu Glu Ser Glu Glu Xaa Asp Glu Xaa Ile
        260             265             270

Xaa Xaa Ser Xaa Ile Ser Lys Ser Asn Asn Ser Ser Gln Xaa Ile Val
        275             280             285
```

<210> 723
<211> 112
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (71)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (103)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (112)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 723
```
Met Lys Thr Leu Leu Leu Leu Val Gly Leu Leu Leu Thr Trp Glu Asn
  1               5               10              15

Gly Arg Val Leu Gly Asp Gln Met Val Ser Asp Thr Glu Leu Gln Glu
            20              25              30

Met Ser Thr Glu Gly Ser Lys Tyr Ile Asn Arg Glu Ile Lys Asn Ala
        35              40              45

Leu Lys Gly Val Lys Gln Ile Lys Thr Leu Ile Glu Gln Thr Asn Glu
    50              55              60

Glu Arg Lys Ser Leu Leu Xaa Asn Leu Glu Glu Ala Lys Lys Lys Lys
 65             70              75              80

Glu Asp Ala Leu Asn Asp Thr Lys Asp Ser Glu Met Lys Leu Lys Ala
            85              90              95

Ser Pro Gly Val Phe Asn Xaa Thr Leu Asp Gly Pro Leu Gly Gly Xaa
            100             105             110
```

<210> 724
<211> 14
<212> PRT
<213> Homo sapiens

<400> 724
Leu Leu Leu Val Gly Leu Gln Gln Leu Val Val Gln Ala Trp
1   5   10

<210> 725
<211> 7
<212> PRT
<213> Homo sapiens

<400> 725
Leu Leu Val Val Leu Leu Ser
1   5

<210> 726
<211> 139
<212> PRT
<213> Homo sapiens

<400> 726
Met Lys Thr Leu Leu Leu Leu Val Gly Leu Leu Leu Thr Trp Glu Asn
1   5   10   15

Gly Arg Val Leu Gly Asp Gln Met Val Ser Asp Thr Glu Leu Gln Glu
            20   25   30

Met Ser Thr Glu Gly Ser Lys Tyr Ile Asn Arg Glu Ile Lys Asn Ala
            35   40   45

Leu Lys Gly Val Lys Gln Ile Lys Thr Leu Ile Glu Gln Thr Asn Glu
        50   55   60

Glu Arg Lys Ser Leu Leu Thr Asn Leu Glu Glu Ala Lys Lys Lys Lys
65   70   75   80

Glu Asp Ala Leu Asn Asp Thr Lys Asp Ser Glu Met Lys Leu Lys Ala
                85   90   95

Ser Gln Gly Val Cys Asn Asp Thr Met Met Ala Leu Trp Glu Glu Cys
            100   105   110

Lys Pro Cys Leu Lys Gln Thr Trp Gly Lys Gly Leu Arg Pro Ser Leu
        115   120   125

Gln Lys Gln His Arg Ala Gly Trp Pro Pro Gly
        130   135

389

```
<210> 727
<211> 112 .
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (103)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (112)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 727
Met Lys Thr Leu Leu Leu Leu Val Gly Leu Leu Leu Thr Trp Glu Asn
 1               5                  10                  15

Gly Arg Val Leu Gly Asp Gln Met Val Ser Asp Thr Glu Leu Gln Glu
            20                  25                  30

Met Ser Thr Glu Gly Ser Lys Tyr Ile Asn Arg Glu Ile Lys Asn Ala
            35                  40                  45

Leu Lys Gly Val Lys Gln Ile Lys Thr Leu Ile Glu Gln Thr Asn Glu
    50                  55                  60

Glu Arg Lys Ser Leu Leu Thr Asn Leu Glu Glu Ala Lys Lys Lys Lys
65              70                  75                  80

Glu Asp Ala Leu Asn Asp Thr Lys Asp Ser Glu Met Lys Leu Lys Ala
            85                  90                  95

Ser Pro Gly Val Phe Asn Xaa Thr Leu Asp Gly Pro Leu Gly Gly Xaa
            100                 105                 110
```

```
<210> 728
<211> 6
<212> PRT
<213> Homo sapiens

<400> 728
Met Leu Leu Leu Tyr Leu
 1               5
```

```
<210> 729
<211> 14
<212> PRT
<213> Homo sapiens

<400> 729
```

```
Pro Gln Gly Pro Asn Asp Val Thr Ala Lys Leu Leu Cys Pro
1               5               10
```

```
<210> 730
<211> 67
<212> PRT
<213> Homo sapiens

<400> 730
Met Ala Pro Ser Gly Pro Leu Leu Leu Val Leu Leu Val Pro Leu Ala
1               5               10                  15

Ala Ala Arg Pro Gly Pro Thr Ser Val Pro Ala Gly Ala Ala Ala Cys
            20              25                  30

Pro Cys Gly Gly Thr Ser Cys Arg Gly Trp Gly Ala Gly Pro Thr Pro
        35              40                  45

Gly Arg Thr Ser Thr Cys Pro His Leu Thr Cys Pro Arg Ala Gly Thr
    50              55                  60

Gly Ala Thr
65
```

```
<210> 731
<211> 129
<212> PRT
<213> Homo sapiens

<400> 731
Met Ala Pro Ser Gly Pro Leu Leu Leu Val Leu Leu Val Pro Leu Ala
1               5               10                  15

Ala Ala Arg Ala Gly Pro Tyr Phe Arg Pro Gly Arg Gly Cys Arg Leu
            20              25                  30

Pro Leu Arg Gly Asp Gln Leu Ser Gly Leu Gly Arg Arg Thr Tyr Pro
        35              40                  45

Arg Pro His Glu Tyr Leu Ser Pro Ser Asp Leu Pro Lys Ser Trp Asp
    50              55                  60

Trp Arg Asn Val Asn Gly Val Asn Tyr Ala Ser Ala Thr Arg Asn Gln
65              70                  75                  80

His Ile Pro Gln Tyr Cys Gly Ser Cys Trp Ala His Gly Ser Thr Ser
                85                  90                  95

Ala Met Ala Gly Pro Asp Gln His Gln Glu Lys Gly Gly Val Ala Leu
            100                 105                 110

His Pro Ala Val Arg Ala Ala Arg Pro Arg Leu Arg Gln Arg Gly Leu
        115                 120                 125

Leu
```

<210> 732
<211> 208
<212> PRT
<213> Homo sapiens

<400> 732
Met Gly Leu Gly Ala Arg Gly Ala Trp Ala Ala Leu Leu Leu Gly Thr
 1   5   10   15

Leu Gln Val Leu Ala Leu Leu Gly Ala Ala His Glu Ser Ala Ala Met
             20   25   30

Ala Ala Ser Ala Asn Ile Glu Asn Ser Gly Leu Pro His Asn Ser Ser
         35   40   45

Ala Asn Ser Thr Glu Thr Leu Gln His Val Pro Ser Asp His Thr Asn
     50   55   60

Glu Thr Ser Asn Ser Thr Val Lys Pro Pro Thr Ser Val Ala Ser Asp
 65   70   75   80

Ser Ser Asn Thr Thr Val Thr Thr Met Lys Pro Thr Ala Ala Ser Asn
             85   90   95

Thr Thr Thr Pro Gly Met Val Ser Thr Asn Met Thr Ser Thr Thr Leu
            100   105   110

Lys Ser Thr Pro Lys Thr Thr Ser Val Ser Gln Asn Thr Ser Gln Ile
        115   120   125

Ser Thr Ser Thr Met Thr Val Thr His Asn Ser Ser Val Thr Ser Ala
    130   135   140

Ala Ser Ser Val Thr Ile Thr Thr Thr Met His Ser Glu Ala Lys Lys
145   150   155   160

Gly Ser Lys Phe Asp Thr Gly Ser Phe Val Gly Gly Ile Val Leu Thr
                165   170   175

Leu Gly Val Leu Ser Ile Leu Tyr Ile Gly Cys Lys Met Tyr Tyr Ser
            180   185   190

Arg Arg Gly Ile Arg Tyr Arg Thr Ile Asp Glu His Asp Ala Ile Ile
        195   200   205

<210> 733
<211> 208
<212> PRT
<213> Homo sapiens

<400> 733
Met Gly Leu Gly Ala Arg Gly Ala Trp Ala Ala Leu Leu Leu Gly Thr

```
    1                5                     10                    15
  Leu Gln Val Leu Ala Leu Leu Gly Ala Ala His Glu Ser Ala Ala Met
                20                    25                    30
  Ala Ala Ser Ala Asn Ile Glu Asn Ser Gly Leu Pro His Asn Ser Ser
            35                    40                    45
  Ala Asn Ser Thr Glu Thr Leu Gln His Val Pro Ser Asp His Thr Asn
        50                   ·55                    60
  Glu Thr Ser Asn Ser Thr Val Lys Pro Pro Thr Ser Val Ala Ser Asp
  65                    70                    75                    80
  Ser Ser Asn Thr Thr Val Thr Thr Met Lys Pro Thr Ala Ala Ser Asn
                85                     90                     95
  Thr Thr Thr Pro Gly Met Val Ser Thr Asn Met Thr Ser Thr Thr Leu
                100                   105                   110
  Lys Ser Thr Pro Lys Thr Thr Ser Val Ser Gln Asn Thr Ser Gln Ile
                115                   120                   125
  Ser Thr Ser Thr Met Thr Val Thr His Asn Ser Ser Val Thr Ser Ala
        130                    135                   140
  Ala Ser Ser Val Thr Ile Thr Thr Thr Met His Ser Glu Ala Lys Lys
  145                    150                   155                   160
  Gly Ser Lys Phe Asp Thr Gly Ser Phe Val Gly Gly Ile Val Leu Thr
                165                   170                   175
  Leu Gly Val Leu Ser Ile Leu Tyr Ile Gly Cys Lys Met Tyr Tyr Ser
                180                    185                  190
  Arg Arg Gly Ile Arg Tyr Arg Thr Ile Asp Glu His Asp Ala Ile Ile
            195                    200                   205
```

```
<210> 734
<211> 208
<212> PRT
<213> Homo sapiens

<400> 734
Met Gly Leu Gly Ala Arg Gly Ala Trp Ala Ala Leu Leu Leu Gly Thr
1                5                     10                    15

Leu Gln Val Leu Ala Leu Leu Gly Ala Ala His Glu Ser Ala Ala Met
                20                    25                    30

Ala Ala Ser Ala Asn Ile Glu Asn Ser Gly Leu Pro His Asn Ser Ser
            35                    40                    45

Ala Asn Ser Thr Glu Thr Leu Gln His Val Pro Ser Asp His Thr Asn
    50                    55                    60
```

```
Glu Thr Ser Asn Ser Thr Val Lys Pro Pro Thr Ser Val Ala Ser Asp
65              70              75              80

Ser Ser Asn Thr Thr Val Thr Thr Met Lys Pro Thr Ala Ala Ser Asn
            85              90              95

Thr Thr Thr Pro Gly Met Val Ser Thr Asn Met Thr Ser Thr Thr Leu
        100             105             110

Lys Ser Thr Pro Lys Thr Thr Ser Val Ser Gln Asn Thr Ser Gln Ile
        115             120             125

Ser Thr Ser Thr Met Thr Val Thr His Asn Ser Ser Val Thr Ser Ala
    130             135             140

Ala Ser Ser Val Thr Ile Thr Thr Thr Met His Ser Glu Ala Lys Lys
145             150             155             160

Gly Ser Lys Phe Asp Thr Gly Ser Phe Val Gly Gly Ile Val Leu Thr
            165             170             175

Leu Gly Val Leu Ser Ile Leu Tyr Ile Gly Cys Lys Met Tyr Tyr Ser
        180             185             190

Arg Arg Gly Ile Arg Tyr Arg Thr Ile Asp Glu His Asp Ala Ile Ile
        195             200             205
```

<210> 735
<211> 208
<212> PRT
<213> Homo sapiens

<400> 735
```
Met Gly Leu Gly Ala Arg Gly Ala Trp Ala Ala Leu Leu Leu Gly Thr
1               5               10              15

Leu Gln Val Leu Ala Leu Leu Gly Ala Ala His Glu Ser Ala Ala Met
        20              25              30

Ala Ala Ser Ala Asn Ile Glu Asn Ser Gly Leu Pro His Asn Ser Ser
        35              40              45

Ala Asn Ser Thr Glu Thr Leu Gln His Val Pro Ser Asp His Thr Asn
    50              55              60

Glu Thr Ser Asn Ser Thr Val Lys Pro Pro Thr Ser Val Ala Ser Asp
65              70              75              80

Ser Ser Asn Thr Thr Val Thr Thr Met Lys Pro Thr Ala Ala Ser Asn
            85              90              95

Thr Thr Thr Pro Gly Met Val Ser Thr Asn Met Thr Ser Thr Thr Leu
        100             105             110
```

                                    394

```
Lys Ser Thr Pro Lys Thr Thr Ser Val Ser Gln Asn Thr Ser Gln Ile
        115             120             125

Ser Thr Ser Thr Met Thr Val Thr His Asn Ser Ser Val Thr Ser Ala
    130             135             140

Ala Ser Ser Val Thr Ile Thr Thr Thr Met His Ser Glu Ala Lys Lys
145             150             155             160

Gly Ser Lys Phe Asp Thr Gly Ser Phe Val Gly Gly Ile Val Leu Thr
            165             170             175

Leu Gly Val Leu Ser Ile Leu Tyr Ile Gly Cys Lys Met Tyr Tyr Ser
        180             185             190

Arg Arg Gly Ile Arg Tyr Arg Thr Ile Asp Glu His Asp Ala Ile Ile
        195             200             205
```

<210> 736
<211> 365
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (144)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (201)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 736
```
Met Phe Val Gly Leu Met Ala Phe Leu Leu Ser Phe Tyr Leu Ile Phe
  1           5             10                  15

Thr Asn Glu Gly Arg Ala Leu Lys Thr Ala Thr Ser Leu Ala Glu Gly
            20              25              30

Leu Ser Leu Val Val Ser Pro Asp Ser Ile His Ser Val Ala Pro Glu
        35              40              45

Asn Glu Gly Arg Leu Val His Ile Ile Gly Ala Leu Arg Thr Ser Lys
    50              55              60

Leu Leu Ser Asp Pro Asn Tyr Gly Val His Leu Pro Ala Val Lys Leu
 65              70              75              80

Arg Arg His Val Glu Met Tyr Gln Trp Val Glu Thr Glu Glu Ser Arg
                85              90              95

Glu Tyr Thr Glu Asp Gly Gln Val Lys Lys Glu Thr Arg Tyr Ser Tyr
            100             105             110
```

Asn Thr Glu Trp Arg Ser Glu Ile Ile Asn Ser Lys Asn Phe Asp Arg
          115   120   125

Glu Ile Gly His Lys Asn Pro Ser Ala Met Ala Val Glu Ser Phe Xaa
      130   135   140

Ala Thr Ala Pro Phe Val Gln Ile Gly Arg Phe Phe Leu Ser Ser Gly
145   150   155   160

Leu Ile Asp Lys Val Asp Asn Phe Lys Ser Leu Ser Leu Ser Lys Leu
              165   170   175

Glu Asp Pro His Val Asp Ile Ile Arg Arg Gly Asp Phe Phe Tyr His
          180   185   190

Ser Glu Asn Pro Lys Tyr Pro Glu Xaa Gly Asp Leu Arg Val Ser Phe
      195   200   205

Ser Tyr Ala Gly Leu Ser Gly Asp Asp Pro Asp Leu Gly Pro Ala His
    210   215   220

Val Val Thr Val Ile Ala Arg Gln Arg Gly Asp Gln Leu Val Pro Phe
225   230   235   240

Ser Thr Lys Ser Gly Asp Thr Leu Leu Leu His His Gly Asp Phe
              245   250   255

Ser Ala Glu Glu Val Phe His Arg Glu Leu Arg Ser Asn Ser Met Lys
          260   265   270

Thr Trp Gly Leu Arg Ala Ala Gly Trp Met Ala Met Phe Met Gly Leu
      275   280   285

Asn Leu Met Thr Arg Ile Leu Tyr Thr Leu Val Asp Trp Phe Pro Val
    290   295   300

Phe Arg Asp Leu Val Asn Ile Gly Leu Lys Ala Phe Ala Phe Cys Val
305   310   315   320

Ala Thr Ser Leu Thr Leu Leu Thr Val Ala Ala Gly Trp Leu Phe Tyr
              325   330   335

Arg Pro Leu Trp Ala Leu Leu Ile Ala Gly Leu Ala Leu Val Pro Ile
          340   345   350

Leu Val Ala Arg Thr Arg Val Pro Ala Lys Lys Leu Glu
          355   360   365

<210> 737
<211> 365
<212> PRT
<213> Homo sapiens

<400> 737
Met Phe Val Gly Leu Met Ala Phe Leu Leu Ser Phe Tyr Leu Ile Phe
  1   5   10   15

Thr Asn Glu Gly Arg Ala Leu Lys Thr Ala Thr Ser Leu Ala Glu Gly

                    20   25   30

Leu Ser Leu Val Val Ser Pro Asp Ser Ile His Ser Val Ala Pro Glu
        35   40   45

Asn Glu Gly Arg Leu Val His Ile Ile Gly Ala Leu Arg Thr Ser Lys
    50   55   60

Leu Leu Ser Asp Pro Asn Tyr Gly Val His Leu Pro Ala Val Lys Leu
65   70   75   80

Arg Arg His Val Glu Met Tyr Gln Trp Val Glu Thr Glu Glu Ser Arg
            85   90   95

Glu Tyr Thr Glu Asp Gly Gln Val Lys Lys Glu Thr Arg Tyr Ser Tyr
            100   105   110

Asn Thr Glu Trp Arg Ser Glu Ile Ile Asn Ser Lys Asn Phe Asp Arg
        115   120   125

Glu Ile Gly His Lys Asn Pro Ser Ala Met Ala Val Glu Ser Phe Met
    130   135   140

Ala Thr Ala Pro Phe Val Gln Ile Gly Arg Phe Phe Leu Ser Ser Gly
145   150   155   160

Leu Ile Asp Lys Val Asp Asn Phe Lys Ser Leu Ser Leu Ser Lys Leu
            165   170   175

Glu Asp Pro His Val Asp Ile Ile Arg Arg Gly Asp Phe Phe Tyr His
            180   185   190

Ser Glu Asn Pro Lys Tyr Pro Glu Val Gly Asp Leu Arg Val Ser Phe
        195   200   205

Ser Tyr Ala Gly Leu Ser Gly Asp Asp Pro Asp Leu Gly Pro Ala His
    210   215   220

Val Val Thr Val Ile Ala Arg Gln Arg Gly Asp Gln Leu Val Pro Phe
225   230   235   240

Ser Thr Lys Ser Gly Asp Thr Leu Leu Leu Leu His His Gly Asp Phe
            245   250   255

Ser Ala Glu Glu Val Phe His Arg Glu Leu Arg Ser Asn Ser Met Lys
            260   265   270

Thr Trp Gly Leu Arg Ala Ala Gly Trp Met Ala Met Phe Met Gly Leu
        275   280   285

Asn Leu Met Thr Arg Ile Leu Tyr Thr Leu Val Asp Trp Phe Pro Val
    290   295   300

Phe Arg Asp Leu Val Asn Ile Gly Leu Lys Ala Phe Ala Phe Cys Val
305   310   315   320

Ala Thr Ser Leu Thr Leu Leu Thr Val Ala Ala Gly Trp Leu Phe Tyr
            325   330   335

Arg Pro Leu Trp Ala Leu Leu Ile Ala Gly Leu Ala Leu Val Pro Ile

                              397

```
              340                    345                  350
```

Leu Val Ala Arg Thr Arg Val Pro Ala Lys Lys Leu Glu
     355   360   365

<210> 738
<211> 34
<212> PRT
<213> Homo sapiens

<400> 738
Met Leu Trp Pro Cys Cys Pro Ser Pro Leu Pro Ile Trp Ala Ser Pro
  1   5   10   15

Ser Pro Arg Leu Thr Trp Trp Cys Leu Leu Ser Cys Phe Gly Thr Gln
        20   25   30

Gly Cys

<210> 739
<211> 34
<212> PRT
<213> Homo sapiens

<400> 739
Met Leu Trp Pro Cys Cys Pro Ser Pro Leu Pro Ile Trp Ala Ser Pro
  1   5   10   15

Ser Pro Arg Leu Thr Trp Trp Cys Leu Leu Ser Cys Phe Gly Thr Gln
        20   25   30

Gly Cys

<210> 740
<211> 41
<212> PRT
<213> Homo sapiens

<400> 740
Met Arg His Cys Cys Trp Leu Trp Ser Ser Cys Met Leu Trp Glu Pro
  1   5   10   15

Ser Thr Thr Leu Gly Ser Ser Pro Arg Leu Val Glu Arg Trp Gln Ser
        20   25   30

Cys Arg Trp Thr Pro Cys Cys Pro Lys
        35   40

<210> 741
<211> 41

<212> PRT
<213> Homo sapiens

<400> 741
Met Arg His Cys Cys Trp Leu Trp Ser Ser Cys Met Leu Trp Glu Pro
 1   5   10   15

Ser Thr Thr Leu Gly Ser Ser Pro Arg Leu Val Glu Arg Trp Gln Ser
            20   25   30

Cys Arg Trp Thr Pro Cys Cys Pro Lys
         35   40

<210> 742
<211> 18
<212> PRT
<213> Homo sapiens

<400> 742
Val His Lys Ser Ala Gly Leu Leu Trp Glu Ala Thr Gly Glu Gly Pro
 1   5   10   15

Gly Ser

<210> 743
<211> 197
<212> PRT
<213> Homo sapiens

<400> 743
Val Glu Ile Val His Glu Leu Lys Gly Glu Gly Lys Ala Gln Arg Lys
 1   5   10   15

Ile Ser Ala Ile His Ile Leu Asp Val Leu Val Leu Asn Gly Thr Asp
            20   25   30

Val Arg Glu Gln His Phe Asn Gln Arg Ile Gln Leu Ala Glu Lys Phe
         35   40   45

Val Lys Ala Val Ser Lys Pro Ser Arg Pro Asp Met Asn Pro Ile Arg
     50   55   60

Val Lys Glu Val Tyr Arg Leu Glu Glu Met Glu Lys Ile Phe Val Arg
 65   70   75   80

Leu Glu Met Lys Ile Ile Lys Gly Ser Ser Gly Thr Pro Lys Leu Ser
                85   90   95

Tyr Thr Gly Arg Asp Asp Arg His Phe Val Pro Met Gly Leu Tyr Ile
            100   105   110

Val Arg Thr Val Asn Glu Pro Trp Thr Met Gly Phe Ser Lys Ser Phe
         115   120   125

Lys Lys Lys Phe Phe Tyr Asn Lys Lys Thr Lys Asp Ser Thr Phe Asp

        130   135   140

Leu Pro Ala Asp Ser Ile Ala Pro Phe His Ile Cys Tyr Tyr Gly Arg
145   150   155   160

Leu Phe Trp Glu Trp Gly Asp Gly Ile Arg Val His Asp Ser Gln Lys
                165   170   175

Pro Gln Asp Gln Asp Lys Leu Ser Lys Glu Asp Val Leu Ser Phe Ile
            180   185   190

Gln Met His Arg Ala
        195

<210> 744
<211> 1
<212> PRT
<213> Homo sapiens

<400> 744
Asn
 1

<210> 745
<211> 61
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (58)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 745
Met His Ser Lys Gln Thr Leu Leu Trp Lys Glu Leu Leu Leu Ala Ile
 1   5   10   15

Pro Cys Ile Ile Ala Ser Pro Arg Ser Leu Trp Pro Arg Trp Ala Ser
            20   25   30

Gly Lys Val Lys Asp Trp Val Asn Thr Ala Arg Val Gly Arg Thr Ser
        35   40   45

Leu Arg Leu Pro Val Arg Lys Val Glu Xaa Ala Trp Val
    50   55   60

<210> 746
<211> 61
<212> PRT
<213> Homo sapiens

<400> 746
Met His Ser Lys Gln Thr Leu Leu Trp Lys Glu Leu Leu Leu Ala Ile
 1   5   10   15

```
Pro Cys Ile Ile Ala Ser Pro Arg Ser Leu Trp Pro Arg Trp Ala Ser
            20              25              30
```

```
Gly Lys Val Lys Asp Trp Val Asn Thr Ala Arg Val Gly Arg Thr Ser
            35              40              45
```

```
Leu Arg Leu Pro Val Arg Lys Val Glu Glu Ala Trp Val
    50              55              60
```

<210> 747
<211> 53
<212> PRT
<213> Homo sapiens

<400> 747
```
Asn Tyr Asn Arg Gly Gly Thr Phe Leu Tyr Gln Lys Ala Lys Ile Lys
1               5               10              15
```

```
His His Val Leu Met Val Phe Tyr Lys Ser Thr Ser Asn Ser Thr Glu
            20              25              30
```

```
Ser Leu Ile Trp Ser Leu Leu Asn Ser Trp Ser Asp Lys Val Thr Phe
        35              40              45
```

```
Pro Lys Arg Val Arg
    50
```

<210> 748
<211> 56
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (35)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (42)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (46)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 748
```
Lys Ser Gln Met Gln Ser Phe Thr Ile Val Thr Ala Tyr Gly Arg Cys
1               5               10              15
```

```
Leu Ser Leu Thr Cys Leu Pro Thr Leu Asn Gln Met Leu Val Phe Lys
            20              25              30
```

```
Ser Asn Xaa Ser Leu Val Ser Pro His Xaa Leu Thr Phe Xaa Asn Ile
```

                    35   40   45

Phe Ala Arg Phe Glu Asn Phe Gln
        50   55

<210> 749
<211> 11
<212> PRT
<213> Homo sapiens

<400> 749
Phe Leu Val Cys Leu Leu Leu Gly Pro Arg Ser
  1   5   10

<210> 750
<211> 6
<212> PRT
<213> Homo sapiens

<400> 750
Thr Val Ala Ile Tyr Asp
  1   5

<210> 751
<211> 46
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (45)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 751
Ile Asn His Val Phe Ile Trp Gly Ser Ile Ala Ile Tyr Phe Ser Ile
  1   5   10   15

Leu Phe Thr Met His Ser Asn Gly Ile Phe Gly Ile Phe Pro Asn Gln
            20   25   30

Phe Pro Phe Val Gly Asn Ala Arg His Ser Leu Thr Xaa Lys
            35   40   45

<210> 752
<211> 109
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (94)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 752
Met Asn Thr Leu Val Leu Trp Ile Phe Gly Phe Leu Ile Cys Leu Gly
 1   5   10   15

Ile Ile Leu Ala Ile Gly Asn Ser Ile Trp Glu Ser Gln Thr Gly Asp
            20   25   30

Gln Phe Arg Thr Phe Leu Phe Trp Asn Glu Gly Glu Lys Ser Ser Val
        35   40   45

Phe Ser Gly Phe Leu Thr Phe Trp Ser Tyr Ile Ile Ile Leu Asn Thr
    50   55   60

Val Val Pro Ile Ser Leu Tyr Val Ser Val Glu Val Ile Arg Leu Gly
65   70   75   80

His Ser Tyr Phe Ile Asn Trp Asp Arg Lys Met Tyr Tyr Xaa Arg Lys
            85   90   95

Ala Ile Pro Ala Val Ala Arg Thr Thr Thr Leu Asn Glu
            100   105

<210> 753
<211> 937
<212> PRT
<213> Homo sapiens

<400> 753
Met Gln Asn Ser Gly Lys Thr Lys Phe Lys Arg Thr Ser Ile Asp Arg
 1   5   10   15

Leu Met Asn Thr Leu Val Leu Trp Ile Phe Gly Phe Leu Ile Cys Leu
            20   25   30

Gly Ile Ile Leu Ala Ile Gly Asn Ser Ile Trp Glu Ser Gln Thr Gly
        35   40   45

Asp Gln Phe Arg Thr Phe Leu Phe Trp Asn Glu Gly Glu Lys Ser Ser
    50   55   60

Val Phe Ser Gly Phe Leu Thr Phe Trp Ser Tyr Ile Ile Ile Leu Asn
65   70   75   80

Thr Val Val Pro Ile Ser Leu Tyr Val Ser Val Glu Val Ile Arg Leu
                85   90   95

Gly His Ser Tyr Phe Ile Asn Trp Asp Arg Lys Met Tyr Tyr Ser Arg
            100   105   110

Lys Ala Ile Pro Ala Val Ala Arg Thr Thr Thr Leu Asn Glu Glu Leu
        115   120   125

Gly Gln Ile Glu Tyr Ile Phe Ser Asp Lys Thr Gly Thr Leu Thr Gln
    130   135   140

Asn Ile Met Thr Phe Lys Arg Cys Ser Ile Asn Gly Arg Ile Tyr Gly
145   150   155   160

403

Glu Val His Asp Asp Leu Asp Gln Lys Thr Glu Ile Thr Gln Glu Lys
                    165   170   175

Glu Pro Val Asp Phe Ser Val Lys Ser Gln Ala Asp Arg Glu Phe Gln
              180   185   190

Phe Phe Asp His Asn Leu Met Glu Ser Ile Lys Met Gly Asp Pro Lys
          195   200   205

Val His Glu Phe Leu Arg Leu Leu Ala Leu Cys His Thr Val Met Ser
    210   215   220

Glu Glu Asn Ser Ala Gly Glu Leu Ile Tyr Gln Val Gln Ser Pro Asp
225   230   235   240

Glu Gly Ala Leu Val Thr Ala Ala Arg Asn Phe Gly Phe Ile Phe Lys
              245   250   255

Ser Arg Thr Pro Glu Thr Ile Thr Ile Glu Glu Leu Gly Thr Leu Val
          260   265   270

Thr Tyr Gln Leu Leu Ala Phe Leu Asp Phe Asn Asn Thr Arg Lys Arg
          275   280   285

Met Ser Val Ile Val Arg Asn Pro Glu Gly Gln Ile Lys Leu Tyr Ser
    290   295   300

Lys Gly Ala Asp Thr Ile Leu Phe Glu Lys Leu His Pro Ser Asn Glu
305   310   315   320

Val Leu Leu Ser Leu Thr Ser Asp His Leu Ser Glu Phe Ala Gly Glu
              325   330   335

Gly Leu Arg Thr Leu Ala Ile Ala Tyr Arg Asp Leu Asp Asp Lys Tyr
          340   345   350

Phe Lys Glu Trp His Lys Met Leu Glu Asp Ala Asn Val Ala Thr Glu
          355   360   365

Glu Arg Asp Glu Arg Ile Ala Gly Leu Tyr Glu Glu Ile Glu Arg Asp
    370   375   380

Leu Met Leu Leu Gly Ala Thr Ala Val Glu Asp Lys Leu Gln Glu Gly
385   390   395   400

Val Ile Glu Thr Val Thr Ser Leu Ser Leu Ala Asn Ile Lys Ile Trp
              405   410   415

Val Leu Thr Gly Asp Lys Gln Glu Thr Ala Ile Asn Ile Gly Tyr Ala
          420   425   430

Cys Asn Met Leu Thr Asp Asp Met Asn Asp Val Phe Val Ile Ala Gly
          435   440   445

Asn Asn Ala Val Glu Val Arg Glu Glu Leu Arg Lys Ala Lys Gln Asn
    450   455   460

Leu Phe Gly Gln Asn Arg Asn Phe Ser Asn Gly His Val Val Cys Glu
465   470   475   480

404

Lys Lys Gln Gln Leu Glu Leu Asp Ser Ile Val Glu Glu Thr Ile Thr
            485   490   495

Gly Asp Tyr Ala Leu Ile Ile Asn Gly His Ser Leu Ala His Ala Leu
            500   505   510

Glu Ser Asp Val Lys Asn Asp Leu Leu Glu Leu Ala Cys Met Cys Lys
        515   520   525

Thr Val Ile Cys Cys Arg Val Thr Pro Leu Gln Lys Ala Gln Val Val
    530   535   540

Glu Leu Val Lys Lys Tyr Arg Asn Ala Val Thr Leu Ala Ile Gly Asp
545   550   555   560

Gly Ala Asn Asp Val Ser Met Ile Lys Ser Ala His Ile Gly Val Gly
            565   570   575

Ile Ser Gly Gln Glu Gly Leu Gln Ala Val Leu Ala Ser Asp Tyr Ser
            580   585   590

Phe Ala Gln Phe Arg Tyr Leu Gln Arg Leu Leu Leu Val His Gly Arg
        595   600   605

Trp Ser Tyr Phe Arg Met Cys Lys Phe Leu Cys Tyr Phe Phe Tyr Lys
    610   615   620

Asn Phe Ala Phe Thr Leu Val His Phe Trp Phe Gly Phe Phe Cys Gly
625   630   635   640

Phe Ser Ala Gln Thr Val Tyr Asp Gln Trp Phe Ile Thr Leu Phe Asn
            645   650   655

Ile Val Tyr Thr Ser Leu Pro Val Leu Ala Met Gly Ile Phe Asp Gln
            660   665   670

Asp Val Ser Asp Gln Asn Ser Val Asp Cys Pro Gln Leu Tyr Lys Pro
        675   680   685

Gly Gln Leu Asn Leu Leu Phe Asn Lys Arg Lys Phe Phe Ile Cys Val
    690   695   700

Met His Gly Ile Tyr Thr Ser Leu Val Leu Phe Phe Ile Pro Tyr Gly
705   710   715   720

Ala Phe Tyr Asn Val Ala Gly Glu Asp Gly Gln His Ile Ala Asp Tyr
            725   730   735

Gln Ser Phe Ala Val Thr Met Ala Thr Ser Leu Val Ile Val Val Ser
        740   745   750

Val Gln Ile Ala Leu Asp Thr Ser Tyr Trp Thr Phe Ile Asn His Val
    755   760   765

Phe Ile Trp Gly Ser Ile Ala Ile Tyr Phe Ser Ile Leu Phe Thr Met
    770   775   780

His Ser Asn Gly Ile Phe Gly Ile Phe Pro Asn Gln Phe Pro Phe Val
785   790   795   800

405

```
Gly Asn Ala Arg His Ser Leu Thr Gln Lys Cys Ile Trp Leu Val Ile
            805               810               815

Leu Leu Thr Thr Val Ala Ser Val Met Pro Val Val Ala Phe Arg Phe
            820               825               830

Leu Lys Val Asp Leu Tyr Pro Thr Leu Ser Asp Gln Ile Arg Arg Trp
        835               840               845

Gln Lys Ala Gln Lys Lys Ala Arg Pro Pro Ser Ser Arg Arg Pro Arg
    850               855               860

Thr Arg Arg Ser Ser Ser Arg Arg Ser Gly Tyr Ala Phe Ala His Gln
865               870               875               880

Glu Gly Tyr Gly Glu Leu Ile Thr Ser Gly Lys Asn Met Arg Ala Lys
            885               890               895

Asn Pro Pro Pro Thr Ser Gly Leu Glu Lys Thr His Tyr Asn Ser Thr
            900               905               910

Ser Trp Ile Glu Asn Leu Cys Lys Lys Thr Thr Asp Thr Val Ser Ser
        915               920               925

Phe Ser Gln Asp Lys Thr Val Lys Leu
    930               935
```

```
<210> 754
<211> 45
<212> PRT
<213> Homo sapiens

<400> 754
Ile Asn Ser Cys Asn Ile Lys Gly Leu Lys Cys Phe Tyr Ile Val Phe
  1             5               10                  15

Gly Cys Leu Leu Leu Val Pro Ile Ser Asp Lys Leu Tyr Gly Leu Leu
            20              25              30

His Leu Ile Pro Phe Ile Trp Arg Val Leu Leu Pro Cys
        35              40              45
```

```
<210> 755
<211> 137
<212> PRT
<213> Homo sapiens

<400> 755
Met Lys Leu Leu Val Ile Leu Leu Phe Ser Gly Leu Ile Thr Gly Phe
  1             5               10                  15

Arg Ser Asp Ser Ser Ser Ser Leu Pro Pro Lys Leu Leu Leu Val Ser
            20              25              30

Phe Asp Gly Phe Arg Ala Asp Tyr Leu Lys Asn Tyr Glu Phe Pro His
```

                35   40   45

Leu Gln Asn Phe Ile Lys Glu Gly Val Leu Val Glu His Val Lys Asn
        50   55   60

Val Phe Ile Thr Lys Thr Phe Pro Asn His Tyr Ser Ile Val Thr Gly
65   70   75   80

Leu Tyr Glu Glu Ser His Gly Ile Val Ala Asn Ser Met Tyr Asp Ala ·
                85   90   95

Val Thr Lys Lys His Phe Ser Asp Ser Asn Asp Lys Asp Pro Phe Trp
            100   105   110

Trp Asn Glu Ala Val Pro Ile Trp Val Thr Asn Gln Leu Gln Glu Thr
        115   120   125

Asp Gln Val Ala Ala Ala Met Trp Ala
   · 130   135

<210> 756
<211> 6
<212> PRT
<213> Homo sapiens

<400> 756
Lys Met Met Met Ile Leu
 ·1   5

<210> 757 ·
<211> 101
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (97)
<223> Xaa equals any .of the naturally occurring L-amino acids

<400> 757
Ser Phe Ser Phe Lys Val Val Asp Val Phe Glu Val Ser Lys Ile Val
 1   5   10   15   ·

Ala Glu Tyr Phe Ile Leu Gly Pro Cys Asn Gly Val Ser Phe Asn Asp
        ·   20   25   30

Cys Ile Ile Val Ile Gly Gly Tyr Glu Phe Gln Lys Ser Ile Leu Gly
            35   40   · 45

Ile Gln Leu Met Ser Gly Phe Tyr Ile Gly Trp Asn Arg Lys Val Cys
        50   ·   55   60

Pro Val Ser Ile Leu Thr Leu Ser Thr Arg His Leu Pro Ile Cys Leu
65   70   ·   ·   75   80

Ser Leu Arg Ser Gln Asn Ile Asn Ser Asn Cys Lys Leu Ser Lys Asn

                    85   90   95

Xaa Lys Ser Ile Cys
            100

<210> 758
<211> 12
<212> PRT
<213> Homo sapiens

<400> 758
Leu Leu Thr Ile Leu Leu Trp Ser Ala Leu Ser Tyr
  1   5   10

<210> 759
<211> 453
<212> PRT
<213> Homo sapiens

<400> 759
Met Lys Leu Leu Val Ile Leu Leu Phe Ser Gly Leu Ile Thr Gly Phe
  1   5   10   15

Arg Ser Asp Ser Ser Ser Ser Leu Pro Pro Lys Leu Leu Leu Val Ser
                20   25   30

Phe Asp Gly Phe Arg Ala Asp Tyr Leu Lys Asn Tyr Glu Phe Pro His
            35   40   45

Leu Gln Asn Phe Ile Lys Glu Gly Val Leu Val Glu His Val Lys Asn
        50   55   60

Val Phe Ile Thr Lys Thr Phe Pro Asn His Tyr Ser Ile Val Thr Gly
 65   70   75   80

Leu Tyr Glu Glu Ser His Gly Ile Val Ala Asn Ser Met Tyr Asp Ala
                85   90   95

Val Thr Lys Lys His Phe Ser Asp Ser Asn Asp Lys Asp Pro Phe Trp
            100   105   110

Trp Asn Glu Ala Val Pro Ile Trp Val Thr Asn Gln Leu Gln Glu Asn
            115   120   125

Arg Ser Ser Ala Ala Ala Met Trp Pro Gly Thr Asp Val Pro Ile His
        130   135   140

Asp Thr Ile Ser Ser Tyr Phe Met Asn Tyr Asn Ser Ser Val Ser Phe
145   150   155   160

Glu Glu Arg Leu Asn Asn Ile Thr Met Trp Leu Asn Asn Ser Asn Pro
                165   170   175

Pro Val Thr Phe Ala Thr Leu Tyr Trp Glu Glu Pro Asp Ala Ser Gly
            180   185   190

                              408

His Lys Tyr Gly Pro Glu Asp Lys Glu Asn Met Ser Arg Val Leu Lys
        195   200   205

Lys Ile Asp Asp Leu Ile Gly Asp Leu Val Gln Arg Leu Lys Met Leu
        210   215   220

Gly Leu Trp Glu Asn Leu Asn Val Ile Ile Thr Ser Asp His Gly Met
225   230   235   240

Thr Gln Cys Ser Gln Asp Arg Leu Ile Asn Leu Asp Ser Cys Ile Asp
                245   250   255

His Ser Tyr Tyr Thr Leu Ile Asp Leu Ser Pro Val Ala Ala Ile Leu
            260   265   270

Pro Lys Ile Asn Arg Thr Glu Val Tyr Asn Lys Leu Lys Asn Cys Ser
        275   280   285

Pro His Met Asn Val Tyr Leu Lys Glu Asp Ile Pro Asn Arg Phe Tyr
    290   295   300

Tyr Gln His Asn Asp Arg Ile Gln Pro Ile Ile Leu Val Ala Asp Glu
305   310   315   320

Gly Trp Thr Ile Val Leu Asn Glu Ser Ser Gln Lys Leu Gly Asp His
            325   330   335

Gly Tyr Asp Asn Ser Leu Pro Ser Met His Pro Phe Leu Ala Ala His
        340   345   350

Gly Pro Ala Phe His Lys Gly Tyr Lys His Ser Thr Ile Asn Ile Val
        355   360   365

Asp Ile Tyr Pro Met Met Cys His Ile Leu Gly Leu Lys Pro His Pro
    370   375   380

Asn Asn Gly Thr Phe Gly His Thr Lys Cys Leu Leu Val Asp Gln Trp
385   390   395   400

Cys Ile Asn Leu Pro Glu Ala Ile Ala Ile Val Ile Gly Ser Leu Leu
            405   410   415

Val Leu Thr Met Leu Thr Cys Leu Ile Ile Ile Met Gln Asn Arg Leu
        420   425   430

Ser Val Pro Arg Pro Phe Ser Arg Leu Gln Leu Gln Glu Asp Asp Asp
        435   440   445

Asp Pro Leu Ile Gly
    450

<210> 760
<211> 11
<212> PRT
<213> Homo sapiens

<400> 760
Trp His Ile Leu Gln Met Lys Gly Leu Thr Trp

409

1   5   10

<210> 761
<211> 31
<212> PRT
<213> Homo sapiens

<400> 761
Phe Ala Ile Phe Ile Tyr Phe Ser Val Ser Tyr Ile Ala Asp Gly Asn
 1   5   10   15

Glu Phe Glu Val Pro Arg Ala Glu Asp Pro Cys Leu Leu Cys Phe
            20   25   30

<210> 762
<211> 245
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (110)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 762
Met Arg Ile Phe Ala Val Phe Ile Phe Met Thr Tyr Trp His Leu Leu
 1   5   10   15

Asn Ala Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr
            20   25   30

Gly Ser Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu
        35   40   45

Asp Leu Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile
    50   55   60

Ile Gln Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser
 65   70   75   80

Tyr Arg Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn
            85   90   95

Ala Ala Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Xaa Val Tyr
            100   105   110

Arg Cys Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val
        115   120   125

Lys Val Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val
    130   135   140

Asp Pro Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr
145   150   155   160

Pro Lys Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser

```
                    165                    170                    175

Gly Lys Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn
            180                    185                    190

Val Thr Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr
            195                    200                    205

Cys Thr Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu
    210                    215                    220

Val Ile Pro Gly Asn Ile Leu Asn Val Ser Ile Lys Ile Cys Leu Thr
225                    230                    235                    240

Leu Ser Pro Ser Thr
                245
```

<210> 763
<211> 290
<212> PRT
<213> Homo sapiens

<400> 763

```
Met Arg Ile Phe Ala Val Phe Ile Phe Met Thr Tyr Trp His Leu Leu
  1             5                  10                     15

Asn Ala Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr
            20                    25                    30

Gly Ser Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu
            35                    40                    45

Asp Leu Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile
    50                    55                    60

Ile Gln Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser
65                    70                    75                    80

Tyr Arg Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn
                85                    90                    95

Ala Ala Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr
            100                    105                    110

Arg Cys Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val
            115                    120                    125

Lys Val Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val
    130                    135                    140

Asp Pro Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr
145                    150                    155                    160

Pro Lys Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser
            165                    170                    175

Gly Lys Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn
            180                    185                    190
```

```
Val Thr Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr
        195                 200                 205

Cys Thr Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu
        210                 215                 220

Val Ile Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr His
225                 230                 235                 240

Leu Val Ile Leu Gly Ala Ile Leu Leu Cys Leu Gly Val Ala Leu Thr
                245                 250                 255

Phe Ile Phe Arg Leu Arg Lys Gly Arg Met Met Asp Val Lys Lys Cys
            260                 265                 270

Gly Ile Gln Asp Thr Asn Ser Lys Lys Gln Ser Asp Thr His Leu Glu
        275                 280                 285

Glu Thr
    290
```

```
<210> 764
<211> 91
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (40)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 764
Ser Val Ser Lys Lys Lys Lys Lys Lys Val Phe Cys Ile Leu Tyr
  1           5                 10                  15

Lys Leu Val Val Val Gly Ser Arg Gly Leu Ser Thr Asp Asp Leu Met
            20                 25                 30

Arg Ser Val Ser Arg Phe Ala Xaa Ser Gln Thr Phe Val Leu Leu Asn
        35                 40                 45

Ser Ser Ser Phe Phe Ser Phe Leu Glu Thr Glu Ser Ser Ser Val Thr
        50                 55                 60

Arg Leu Glu Cys Ser Gly Thr Ile Lys Ala Tyr Cys Ser Leu Tyr Leu
65                 70                 75                 80

Pro Gly Ser Arg Asn Pro Pro Thr Leu Ala Ser
            85                 90
```

```
<210> 765
<211> 53
<212> PRT
<213> Homo sapiens
```

<400> 765
Met Val Tyr Cys Val Val Ser Pro Arg Arg Ala Thr Leu Phe Cys Val
1   5   10   15

Leu Leu Leu Gly Thr Arg Cys Glu Ile Ile Ser Val Arg Ser Ser Phe
                20   25   30

Gly Glu Tyr Asp Lys Ile Asn Ser Ile Leu Lys Gly Leu Leu Lys Ile
        35   40   45

Pro Phe Asn Glu Phe
        50

<210> 766
<211> 95
<212> PRT
<213> Homo sapiens

<400> 766
Pro Pro Arg Thr Arg Leu Phe Leu Val Ile Leu Phe Cys Cys Phe Arg
1   5   10   15

Arg Asn Asp Thr Ser Phe Cys Phe Phe Glu Glu Lys Val Phe His Val
                20   25   30

Thr Val Ala Arg Thr Asn Thr Lys Arg Ser Arg Leu Gln Met Leu Gln
        35   40   45

Ala Cys Ala Val Val Cys Val Cys Val Cys Val Cys Val Cys
    50   55   60

Thr Tyr Ile Tyr Gly Lys His Ile Tyr Cys Cys Ala Ala Arg Gly Lys
65   70   75   80

Pro Ala Lys Lys Cys Val Cys Leu Tyr Glu Met Phe Glu Lys Arg
            85   90   95

<210> 767
<211> 53
<212> PRT
<213> Homo sapiens

<400> 767
Met Val Tyr Cys Val Val Ser Pro Arg Arg Ala Thr Leu Phe Cys Val
1   5   10   15

Leu Leu Leu Gly Thr Arg Cys Glu Ile Ile Ser Val Arg Ser Ser Phe
                20   25   30

Gly Glu Tyr Asp Lys Ile Asn Ser Ile Leu Lys Gly Leu Leu Lys Ile
        35   40   45

Pro Phe Asn Glu Phe
        50

```
<210> 768
<211> 41
<212> PRT
<213> Homo sapiens

<400> 768
Met Pro Ser Gly Cys Arg Cys Leu His Leu Val Cys Leu Leu Cys Ile
1               5                   10                  15

Leu Gly Ala Pro Gly Gln Pro Val Arg Ala Asp Asp Cys Ser Pro Thr
            20                  25                  30

Val Thr Trp Pro Thr Ala Ala Val Asn
        35                  40
```

```
<210> 769
<211> 20
<212> PRT
<213> Homo sapiens

<400> 769
Pro Gly Leu Cys Ser Gln Leu His Val Pro Leu Leu Gly Gly Leu Cys
1               5                   10                  15

Gly Cys Pro Leu
            20
```

```
<210> 770
<211> 383
<212> PRT
<213> Homo sapiens

<400> 770
Met Pro Ser Gly Cys Arg Cys Leu His Leu Val Cys Leu Leu Cys Ile
1               5                   10                  15

Leu Gly Ala Pro Gly Gln Pro Val Arg Ala Asp Asp Cys Ser Ser His
            20                  25                  30

Cys Asp Leu Ala His Gly Cys Cys Ala Pro Asp Gly Ser Cys Arg Cys
        35                  40                  45

Asp Pro Gly Trp Glu Gly Leu His Cys Glu Arg Cys Val Arg Met Pro
    50                  55                  60

Gly Cys Gln His Gly Thr Cys His Gln Pro Trp Gln Cys Ile Cys His
65                  70                  75                  80

Ser Gly Trp Ala Gly Lys Phe Cys Asp Lys Asp Glu His Ile Cys Thr
                85                  90                  95

Thr Gln Ser Pro Cys Gln Asn Gly Gly Gln Cys Met Tyr Asp Gly Gly
            100                 105                 110

Gly Glu Tyr His Cys Val Cys Leu Pro Gly Phe His Gly Arg Asp Cys
```

```
             115                    120                   125   .

Glu Arg Lys Ala Gly Pro Cys Glu Gln Ala Gly Ser Pro Cys Arg Asn
    130                 135                 140

Gly Gly Gln Cys Gln Asp Asp Gln Gly Phe Ala Leu Asn Phe Thr Cys
145                 150                 155                 160

Arg Cys Leu Val Gly Phe Val Gly Ala Arg Cys Glu Val Asn Val Asp
                165                 170                 175

Asp Cys Leu Met Arg Pro Cys Ala Asn Gly Ala Thr Cys Leu Asp Gly
             180                 185                 190

Ile Asn Arg Phe Ser Cys Leu Cys Pro Glu Gly Phe Ala Gly Arg Phe
        195                 200                 205

Cys Thr Ile Asn Leu Asp Asp Cys Ala Ser Arg Pro Cys Gln Arg Gly
    210                 215                 220

Ala Arg Cys Arg Asp Arg Val His Asp Phe Asp Cys Leu Cys Pro Ser
225                 230                 235                 240

Gly Tyr Gly Gly Lys Thr Cys Glu Leu Val Leu Pro Val Pro Asp Pro
             245                 250                 255

Pro Thr Thr Val Asp Thr Pro Leu Gly Pro Thr Ser Ala Val Val Val
             260                 265                 270

Pro Ala Thr Gly Pro Ala Pro His Ser Ala Gly Ala Gly Leu Leu Arg
    275                 280                 285

Ile Ser Val Lys Glu Val Val Arg Arg Gln Glu Ala Gly Leu Gly Glu
    290                 295                 300

Pro Ser Leu Val Ala Leu Val Val Phe Gly Ala Leu Thr Ala Ala Leu
305                 310                 315                 320

Val Leu Ala Thr Val Leu Leu Thr Leu Arg Ala Trp Arg Arg Gly Val
             325                 330                 335

Cys Pro Pro Gly Pro Cys Cys Tyr Pro Ala Pro His Tyr Ala Pro Ala
        340                 345                 350

Cys Gln Asp Gln Glu Cys Gln Val Ser Met Leu Pro Ala Gly Leu Pro
        355                 360                 365

Leu Pro Arg Asp Leu Pro Pro Glu Pro Gly Lys Thr Thr Ala Leu
    370                 375                 380


<210> 771
<211> 10
<212> PRT
<213> Homo sapiens

<400> 771
Pro Gln Thr Ala Gly Pro Gln Lys Cys Ala
  1             5                 10
```

<210> 772
<211> 10
<212> PRT
<213> Homo sapiens

<400> 772
Pro Phe Pro Ala Gly Pro His Ser Trp Ile
 1   5   10

<210> 773
<211> 35
<212> PRT
<213> Homo sapiens

<400> 773
Met Gly Arg Gly Pro Trp Asp Ala Gly Pro Ser Arg Arg Leu Leu Pro
 1   5   10   15

Leu Leu Leu Leu Leu Gly Leu Ala Arg Gly Ala Ala Glu Arg Arg Ala
            20   25   30

Pro Thr Val
        35

<210> 774
<211> 747
<212> PRT
<213> Homo sapiens

<400> 774
Met Gly Arg Gly Pro Trp Asp Ala Gly Pro Ser Arg Arg Leu Leu Pro
 1   5   10   15

Leu Leu Leu Leu Leu Gly Leu Ala Arg Gly Ala Ala Gly Ala Pro Gly
            20   25   30

Pro Asp Gly Leu Asp Val Cys Ala Thr Cys His Glu His Ala Thr Cys
   .35   40   45

Gln Gln Arg Glu Gly Lys Lys Ile Cys Ile Cys Asn Tyr Gly Phe Val
      50   55   60

Gly Asn Gly Arg Thr Gln Cys Val Asp Lys Asn Glu Cys Gln Phe Gly
 65   70   75   80

Ala Thr Leu Val Cys Gly Asn His Thr Ser Cys His Asn Thr Pro Gly
                85   90   95

Gly Phe Tyr Cys Ile Cys Leu Glu Gly Tyr Arg Ala Thr Asn Asn Asn
            100   105   110

Lys Thr Phe Ile Pro Asn Asp Gly Thr Phe Cys Thr Asp Ile Asp Glu
        115   120   125

416

Cys Glu Val Ser Gly Leu Cys Arg His Gly Gly Arg Cys Val Asn Thr
    130   135   140

His Gly Ser Phe Glu Cys Tyr Cys Met Asp Gly Tyr Leu Pro Arg Asn
145   150   155   160

Gly Pro Glu Pro Phe His Pro Thr Thr Asp Ala Thr Ser Cys Thr Glu
                165   170   175

Ile Asp Cys Gly Thr Pro Pro Glu Val Pro Asp Gly Tyr Ile Ile Gly
            180   185   190

Asn Tyr Thr Ser Ser Leu Gly Ser Gln Val Arg Tyr Ala Cys Arg Glu
        195   200   205

Gly Phe Phe Ser Val Pro Glu Asp Thr Val Ser Ser Cys Thr Gly Leu
    210   215   220

Gly Thr Trp Glu Ser Pro Lys Leu His Cys Gln Glu Ile Asn Cys Gly
225   230   235   240

Asn Pro Pro Glu Met Arg His Ala Ile Leu Val Gly Asn His Ser Ser
            245   250   255

Arg Leu Gly Gly Val Ala Arg Tyr Val Cys Gln Glu Gly Phe Glu Ser
            260   265   270

Pro Gly Gly Lys Ile Thr Ser Val Cys Thr Glu Lys Gly Thr Trp Arg
        275   280   285

Glu Ser Thr Leu Thr Cys Thr Glu Ile Leu Thr Lys Ile Asn Asp Val
    290   295   300

Ser Leu Phe Asn Asp Thr Cys Val Arg Trp Gln Ile Asn Ser Arg Arg
305   310   315   320

Ile Asn Pro Lys Ile Ser Tyr Val Ile Ser Ile Lys Gly Gln Arg Leu
            325   330   335

Asp Pro Met Glu Ser Val Arg Glu Glu Thr Val Asn Leu Thr Thr Asp
        340   345   350

Ser Arg Thr Pro Glu Val Cys Leu Ala Leu Tyr Pro Gly Thr Asn Tyr
        355   360   365

Thr Val Asn Ile Ser Thr Ala Pro Pro Arg Arg Ser Met Pro Ala Val
    370   375   380

Ile Gly Phe Gln Thr Ala Glu Val Asp Leu Leu Glu Asp Asp Gly Ser
385   390   395   400

Phe Asn Ile Ser Ile Phe Asn Glu Thr Cys Leu Lys Leu Asn Arg Arg
            405   410   415

Ser Arg Lys Val Gly Ser Glu His Met Tyr Gln Phe Thr Val Leu Gly
        420   425   430

Gln Arg Trp Tyr Leu Ala Asn Phe Ser His Ala Thr Ser Phe Asn Phe
    435   440   445

417

Thr Thr Arg Glu Gln Val Pro Val Val Cys Leu Asp Leu Tyr Pro Thr
    450   455   460

Thr Asp Tyr Thr Val Asn Val Thr Leu Leu Arg Ser Pro Lys Arg His
465   470   475   480

Ser Val Gln Ile Thr Ile Ala Thr Pro Pro Ala Val Lys Gln Thr Ile
                485   490   495

Ser Asn Ile Ser Gly Phe Asn Glu Thr Cys Leu Arg Trp Arg Ser Ile
                500   505   510

Lys Thr Ala Asp Met Glu Glu Met Tyr Leu Phe His Ile Trp Gly Gln
            515   520   525

Arg Trp Tyr Gln Lys Glu Phe Ala Gln Glu Met Thr Phe Asn Ile Ser
    530   535   540

Ser Ser Ser Arg Asp Pro Glu Val Cys Leu Asp Leu Arg Pro Gly Thr
545   550   555   560

Asn Tyr Asn Val Ser Leu Arg Ala Leu Ser Ser Glu Leu Pro Val Val
                565   570   575

Ile Ser Leu Thr Thr Gln Ile Thr Glu Pro Pro Leu Pro Glu Val Glu
            580   585   590

Phe Phe Thr Val His Arg Gly Pro Leu Pro Arg Leu Arg Leu Arg Lys
        595   600   605

Ala Lys Glu Lys Asn Gly Pro Ile Ser Ser Tyr Gln Val Leu Val Leu
    610   615   620

Pro Leu Ala Leu Gln Ser Thr Phe Ser Cys Asp Ser Glu Gly Ala Ser
625   630   635   640

Ser Phe Phe Ser Asn Ala Ser Asp Ala Asp Gly Tyr Val Ala Ala Glu
                645   650   655

Leu Leu Ala Lys Asp Val Pro Asp Asp Ala Met Glu Ile Pro Ile Gly
            660   665   670

Asp Arg Leu Tyr Tyr Gly Glu Tyr Tyr Asn Ala Pro Leu Lys Arg Gly
        675   680   685

Ser Asp Tyr Cys Ile Ile Leu Arg Ile Thr Ser Glu Trp Asn Lys Val
    690   695   700

Arg Arg His Ser Cys Ala Val Trp Ala Gln Val Lys Asp Ser Ser Leu
705   710   715   720

Met Leu Leu Gln Met Ala Gly Val Gly Leu Gly Ser Leu Ala Val Val
                725   730   735

Ile Ile Leu Thr Phe Leu Ser Phe Ser Ala Val
            740   745

418

```
<210> 775
<211> 45
<212> PRT
<213> Homo sapiens

<400> 775
Thr Trp Trp Pro Pro Cys Pro Pro Ala Pro Met Gly Gln Val Gly Ser
1               5               10              15

Cys Phe Ala Gly Leu Cys Gly Gln His Thr Arg Gly Leu His Gly Trp
            20              25              30

Pro Gln Pro Ser Pro Ala Ala Pro Gln Met Arg Ser Cys
        35              40              45
```

```
<210> 776
<211> 17
<212> PRT
<213> Homo sapiens

<400> 776
Gly Trp Cys Ser Arg Arg Asp Ser Cys Trp Pro Ser Pro Pro Thr Met
1               5               10              15

Pro
```

```
<210> 777
<211> 120
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (103)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 777
Met Gly Thr Val Ser Ser Arg Arg Ser Trp Trp Pro Leu Pro Leu Leu
1               5               10              15

Leu Leu Leu Leu Leu Leu Leu Gly Pro Ala Gly Ala Arg Ala Gln Glu
            20              25              30

Asp Glu Asp Gly Asp Tyr Glu Glu Leu Val Leu Ala Leu Arg Ser Glu
        35              40              45

Glu Asp Gly Leu Ala Glu Ala Pro Glu His Gly Thr Thr Ala Thr Phe
        50              55              60

His Arg Cys Ala Lys Asp Pro Trp Arg Leu Pro Gly Thr Tyr Val Val
65              70              75              80

Val Leu Lys Glu Glu Thr His Leu Ser Gln Ser Glu Arg Thr Ala Arg
                85              90              95
```

```
Arg Leu Gln Ala Gln Ala Xaa Arg Arg Gly Tyr Leu Pro Arg Ser Cys
            100             105             110

Met Ser Ser Met Ala Phe Phe Leu
        115             120
```

```
<210> 778
<211> 269
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (236)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (257)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 778
Met Gly Thr Val Ser Ser Arg Arg Ser Trp Trp Pro Leu Pro Leu Leu
  1               5               10              15

Leu Leu Leu Leu Leu Leu Leu Gly Pro Ala Gly Ala Arg Ala Gln Glu
            20              25              30

Asp Glu Asp Gly Asp Tyr Glu Glu Leu Val Leu Ala Leu Arg Ser Glu
        35              40              45

Glu Asp Gly Leu Ala Glu Ala Pro Glu His Gly Thr Thr Ala Thr Phe
    50              55              60

His Arg Cys Ala Lys Asp Pro Trp Arg Leu Pro Gly Thr Tyr Val Val
  65              70              75              80

Val Leu Lys Glu Glu Thr His Leu Ser Gln Ser Glu Arg Thr Ala Arg
            85              90              95

Arg Leu Gln Ala Gln Ala Ala Arg Arg Gly Tyr Leu Thr Lys Ile Leu
            100             105             110

His Val Phe His Gly Leu Leu Pro Gly Phe Leu Val Lys Met Ser Gly
        115             120             125

Asp Leu Leu Glu Leu Ala Leu Lys Leu Pro His Val Asp Tyr Ile Glu
    130             135             140

Glu Asp Ser Ser Val Phe Ala Gln Ser Ile Pro Trp Asn Leu Glu Arg
145             150             155             160

Ile Thr Pro Pro Arg Tyr Arg Ala Asp Glu Tyr Gln Pro Pro Asp Gly
            165             170             175

Gly Ser Leu Val Glu Val Tyr Leu Leu Asp Thr Ser Ile Gln Ser Asp
            180             185             190
```

```
His Arg Glu Ile Glu Gly Arg Val Met Val Thr Asp Phe Glu Asn Val
        195             200             205

Pro Glu Glu Asp Gly Thr Arg Phe His Arg Gln Ala Ser Lys Cys Asp
    210             215             220

Ser His Gly Pro Thr Trp Gln Gly Trp Ser Ala Xaa Gly Met Pro Ala
225             230             235             240

Trp Pro Arg Val Pro Ala Cys Ala Ala Cys Ala Cys Phe Pro Lys Lys
            245             250             255

Xaa Pro Leu Leu Gly Gly Pro Pro Gln Lys Lys Gly Gly
        260             265
```

<210> 779
<211> 107
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (92)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 779
```
Met Val Arg Tyr Thr Tyr Ser Met Leu Ser Val Ile Gly Ile Ser Tyr
1               5               10              15

Ala Val Leu Thr Trp Leu Ser Gln Thr Leu Trp Met Pro Ile Tyr Pro
            20              25              30

Leu Cys Val Leu Ala Glu Ala Phe Ala Ile Tyr Gln Ser Leu Pro Tyr
        35              40              45

Phe Glu Ser Phe Gly Thr Tyr Ser Thr Lys Leu Pro Phe Asp Leu Ser
    50              55              60

Ile Tyr Phe Pro Tyr Val Leu Lys Ile Tyr Leu Met Met Leu Phe Ile
65              70              75              80

Gly Met Tyr Phe Thr Tyr Ser His Leu Tyr Ser Xaa Arg Arg Asp Ile
            85              90              95

Leu Gly Ile Phe Pro Ile Lys Lys Lys Lys Met
            100             105
```

<210> 780
<211> 37
<212> PRT
<213> Homo sapiens

<400> 780
```
Met Val Arg Tyr Thr Tyr Ser Met Leu Ser Val Ile Gly Ile Ser Tyr
1               5               10              15
```

Ala Val Leu Thr Trp Ala Gln Ser Asn Thr Met Asp Ala Asn Leu Ser
            20   25   30

Phe Val Cys Ser Cys
        35

<210> 781
<211> 107
<212> PRT
<213> Homo sapiens

<400> 781
Met Val Arg Tyr Thr Tyr Ser Met Leu Ser Val Ile Gly Ile Ser Tyr
 1   5   10   15

Ala Val Leu Thr Trp Leu Ser Gln Thr Leu Trp Met Pro Ile Tyr Pro
            20   25   30

Leu Cys Val Leu Ala Glu Ala Phe Ala Ile Tyr Gln Ser Leu Pro Tyr
        35   40   45

Phe Glu Ser Phe Gly Thr Tyr Ser Thr Lys Leu Pro Phe Asp Leu Ser
    50   55   60

Ile Tyr Phe Pro Tyr Val Leu Lys Ile Tyr Leu Met Met Leu Phe Ile
65   70   75   80

Gly Met Tyr Phe Thr Tyr Ser His Leu Tyr Ser Glu Arg Arg Asp Ile
                85   90   95

Leu Gly Ile Phe Pro Ile Lys Lys Lys Lys Met
            100   105

<210> 782
<211> 53
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (40)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 782
Ser Asn Pro Ser His Ile Leu Met Ile Ser Ile Leu Leu Ser His Ala
 1   5   10   15

Ser Arg Gly Ala Gly Ala Asp Pro Lys Arg Ser Cys Cys Pro Gln Arg
            20   25   30

Val Gly Ser Arg Gly Arg Ala Xaa Val Arg Leu Thr Arg Leu Cys Ser
        35   40   45

Gln Pro Ser Pro His
    50

```
<210> 783
<211> 33
<212> PRT
<213> Homo sapiens

<400> 783
His His Val Ala Gln Ala Leu Pro Pro Ala Gly Ala Pro Arg Gly Arg
 1               5                   10                  15

Pro His Gln Pro His Pro Ala Pro Val Gly Gln Gly Ser Pro Glu Arg
            20                  25                  30

Gly
```



```
<210> 784
<211> 74
<212> PRT
<213> Homo sapiens

<400> 784
Met Gly Phe His His Val Ser Gln Ala Ala Leu Val Leu Leu Leu Leu
 1               5                   10                  15

Leu Leu Leu Leu Leu Leu Phe Asp Thr Glu Ser Arg Ser Ser Leu Ala
            20                  25                  30

Thr Glu Arg Asp Ser Ile Ser Lys Lys Lys Asn Lys Lys Thr Lys Lys
         35                  40                  45

Lys Asn Arg Lys Glu Thr Lys Asn Val Val Leu Ile Leu Ile Asn Ser
     50                  55                  60

Asn Ser Phe Met Trp Leu Ala Ala Ala Leu
 65                  70
```



```
<210> 785
<211> 74
<212> PRT
<213> Homo sapiens

<400> 785
Met Gly Phe His His Val Ser Gln Ala Ala Leu Val Leu Leu Leu Leu
 1               5                   10                  15

Leu Leu Leu Leu Leu Leu Phe Asp Thr Glu Ser Arg Ser Ser Leu Ala
            20                  25                  30

Thr Glu Arg Asp Ser Ile Ser Lys Lys Lys Asn Lys Lys Thr Lys Lys
         35                  40                  45

Lys Asn Arg Lys Glu Thr Lys Asn Val Val Leu Ile Leu Ile Asn Ser
     50                  55                  60
```

Asn Ser Phe Met Trp Leu Ala Ala Ala Leu
 65   70

<210> 786
<211> 178
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (157)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (170)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (171)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (177)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 786
Met Ala Ala Pro Arg Gly Arg Ala Ala Pro Trp Thr Thr Ala Leu Leu
 1   5   10   15

Leu Leu Leu Ala Ser Gln Val Leu Ser Pro Gly Ser Cys Ala Asp Glu
            20   25   30

Glu Glu Val Pro Glu Glu Trp Val Leu Leu His Val Val Gln Gly Gln
            35   40   45

Ile Gly Ala Gly Asn Tyr Ser Tyr Leu Arg Leu Asn His Glu Gly Lys
        50   55   60

Ile Val Leu Arg Met Arg Ser Leu Lys Gly Asp Ala Asp Leu Tyr Val
 65   70   75   80

Ser Ala Ser Ser Leu His Pro Ser Phe Asp Asp Tyr Glu Leu Gln Ser
                85   90   95

Ala Thr Cys Gly Pro Asp Ala Val Ser Ile Pro Ala His Phe Arg Arg
            100   105   110

Pro Val Gly Ile Gly Val Tyr Gly His Pro Ser His Leu Glu Ser Glu
            115   120   125

Phe Glu Met Lys Val Tyr Tyr Asp Gly Thr Val Glu Gln His Pro Phe
        130   135   140

Gly Glu Ala Ala Tyr Pro Ala Asp Gly Gln Met Pro Xaa Arg Ser Thr
145   150   155   160

424

Leu Val Pro Arg Lys Thr Pro Arg Lys Xaa Xaa Asn Leu Phe Ser Gly
            165   170   175

Xaa Tyr

<210> 787
<211> 191
<212> PRT
<213> Homo sapiens

<400> 787
Met Ala Ala Pro Arg Gly Arg Ala Ala Pro Trp Thr Thr Ala Leu Leu
  1   5   10   15

Leu Leu Leu Ala Ser Gln Val Leu Ser Pro Gly Ser Cys Ala Asp Glu
            20   25   30

Glu Glu Val Pro Glu Glu Trp Val Leu Leu His Val Val Gln Gly Gln
        35   40   45

Ile Gly Ala Gly Asn Tyr Ser Tyr Leu Arg Leu Asn His Glu Gly Lys
    50   55   60

Ile Val Leu Arg Met Arg Ser Leu Lys Gly Asp Ala Asp Leu Tyr Val
65   70   75   80

Ser Ala Ser Ser Leu His Pro Ser Phe Asp Asp Tyr Glu Leu Gln Ser
                85   90   95

Ala Thr Cys Gly Pro Asp Ala Val Ser Ile Pro Ala His Phe Arg Arg
            100   105   110

Pro Val Gly Ile Gly Val Tyr Gly His Pro Ser His Leu Glu Ser Glu
        115   120   125

Phe Glu Met Lys Val Tyr Tyr Asp Gly Thr Val Glu Gln His Pro Phe
    130   135   140

Gly Glu Ala Ala Tyr Pro Ala Asp Gly Ala Asp Ala Gly Gln Lys His
145   150   155   160

Ala Gly Ala Pro Glu Asp Ala Ser Gln Glu Glu Glu Ser Val Leu Trp
            165   170   175

Thr Ile Leu Ile Ser Ile Leu Lys Leu Glu Leu Glu Ile Leu Phe
            180   185   190

<210> 788
<211> 8
<212> PRT
<213> Homo sapiens

<400> 788
Thr Ala Ile Phe Phe Leu Leu Val

425

1   5

```
<210> 789
<211> 56
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (9)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (24)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (30)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 789
Met Arg Phe Trp Phe Leu Val Phe Xaa Phe Phe Phe Phe Pro Glu Ala
 1               5                  10                  15

His Val Tyr Pro Thr Ser Trp Xaa Val Ser Glu Gln Gly Xaa Ala Thr
            20                  25                  30

Ile Ser Val Thr Pro Gly Ile Leu Asn Trp Ile Phe Val Glu Glu Glu
            35                  40                  45

Asn Asn Thr Val Leu Asp Phe Pro
        50                  55


<210> 790
<211> 279
<212> PRT
<213> Homo sapiens

<400> 790
Glu Glu Arg Trp Lys Ser Pro Glu Val Arg Trp Ala Pro Gly Val Ala
 1               5                  10                  15

Met Glu Glu Ser Gly Tyr Glu Ser Val Leu Cys Val Lys Pro Asp Val
            20                  25                  30

His Val Tyr Arg Ile Pro Pro Arg Ala Thr Asn Arg Gly Tyr Arg Ala
            35                  40                  45

Ala Glu Trp Gln Leu Asp Gln Pro Ser Trp Ser Gly Arg Leu Arg Ile
        50                  55                  60

Thr Ala Lys Gly Gln Met Ala Tyr Ile Lys Leu Glu Asp Arg Thr Ser
 65                  70                  75                  80
```

```
Gly Glu Leu Phe Ala Gln Ala Pro Val Asp Gln Phe Pro Gly Thr Ala
              85                      90                  95

Val Glu Ser Val Thr Asp Ser Ser Arg Tyr Phe Val Ile Arg Ile Glu
              100                    105                 110

Asp Gly Asn Gly Arg Arg Ala Phe Ile Gly Ile Gly Phe Gly Asp Arg
          115                  120                  125

Gly Asp Ala Phe Asp Phe Asn Val Ala Leu Gln Asp His Phe Lys Trp
    130              135                  140

Val Lys Gln Gln Cys Glu Phe Ala Lys Gln Ala Gln Asn Pro Asp Gln
145              150                  155                 160

Gly Pro Lys Leu Asp Leu Gly Phe Lys Glu Gly Gln Thr Ile Lys Leu
              165                  170                 175

Asn Ile Ala Asn Met Lys Lys Lys Glu Gly Ala Ala Gly Asn Pro Arg
              180              185                  190

Val Arg Pro Ala Ser Thr Gly Gly Leu Ser Leu Leu Pro Pro Pro Pro
          195              200                  205

Gly Gly Lys Thr Ser Thr Leu Ile Pro Pro Pro Gly Glu Gln Leu Ala
    210              215                  220

Val Gly Gly Ser Leu Val Gln Pro Ala Val Ala Pro Ser Ser Gly Gly
225              230                  235                 240

Ala Pro Val Pro Trp Pro Gln Pro Asn Pro Ala Thr Ala Asp Ile Trp
              245                  250                 255

Gly Asp Phe Thr Lys Ser Thr Gly Ser Thr Ser Ser Gln Thr Gln Pro
          260                  265                 270

Gly Thr Gly Trp Val Gln Phe
          275
```

```
<210> 791
<211> 106
<212> PRT
<213> Homo sapiens

<400> 791
Arg Ser Arg Ser Lys Pro Arg Cys Asn Cys Glu Ile Val Thr Ile Phe
  1           5                  10                  15

Phe Ala Arg Phe Lys Ile Gly Pro Gly Arg His Arg Lys Arg Lys Ile
              20                  25                  30

Pro Lys Leu Cys Ser Ser Gly Ser Thr Ile Gly Arg Val Tyr Ser Leu
      35                  40                  45

Pro Gly Leu Leu Arg Arg Gly Ser Cys Leu Phe Gly Tyr Ile Thr Pro
    50                  55                  60

Asp Trp Phe Val Leu Lys Ile Asn Val Ile Met Leu Val Ser Tyr Leu
```

```
     65                      70                      75 ·                    80
```

Met Val Ser Leu Glu His Ser Pro Leu Ile Leu Phe Glu Arg Val Gly
```
                    85                      90            ·      95
```

Gly Arg Asp Cys Glu Gly Arg Glu Lys Cys
```
          100                  · 105
```

<210> 792
<211> 56
<212> PRT
<213> Homo sapiens

<400> 792
Met Arg Phe Trp Phe Leu Val Phe Cys Phe Phe Phe Pro Glu Ala
```
,  1             5                  10                  15
```

His Val Tyr Pro Thr Ser Trp Ser Val Ser Glu Gln Gly Cys Ala Thr
```
               20         ·         25                  30
```

Ile Ser Val Thr Pro Gly Ile Leu Asn Trp Ile Phe Val Glu Glu Glu
```
          · 35              ·      40                  45
```

Asn Asn Thr Val Leu Asp Phe Pro
```
     50                  55
```

<210> 793
<211> 41 .
<212> PRT
<213> Homo sapiens.

<400> 793
Met Thr Phe Ser Pro Leu Met Cys Tyr Cys Cys Cys Trp Val Gly Trp
```
     1              5                  10                  15
```

Ala Phe Cys Leu Phe Val Trp Trp Gln Ser Val Val Val Gly Ser Gly
```
               20                  25.                 30
```

Arg Ala Tyr Ile Gly Phe Ser Ser Tyr
```
          35                  40
```

<210> 794
<211> 41
<212> PRT
<213> Homo sapiens

<400> 794
Met Thr Phe Ser Pro Leu Met Cys Tyr Cys Cys Cys Trp Val Gly Trp
```
  ,  1           ·  5                  10   ·             15
```

Ala Phe Cys Leu Phe Val Trp Trp Gln Ser Val Val Val Gly Ser Gly
```
         .     20                  25                  30·
```

Arg Ala Tyr Ile Gly Phe Ser Ser Tyr

          35   40

<210> 795
<211> 41
<212> PRT
<213> Homo sapiens

<400> 795
Met Thr Phe Ser Pro Leu Met Cys Tyr Cys Cys Cys Trp Val Gly Trp
 1   5   10   15

Ala Phe Cys Leu Phe Val Trp Trp Gln Ser Val Val Val Gly Ser Gly
            20   25   30

Arg Ala Tyr Ile Gly Phe Ser Ser Tyr
        35   40

<210> 796
<211> 43
<212> PRT
<213> Homo sapiens

<400> 796
Phe Leu Arg Phe Asp Gly Ile Ile Met Glu Ala Leu Tyr Lys Leu Asn
 1   5   10   15

Glu Ile Gly Lys Gly Glu Leu Thr Leu Ser Ile Met His Ser Gly Leu
            20   25   30

Lys Ile Arg Phe Gln Asn Glu Met Ser Asp Leu
        35   40

<210> 797
<211> 12
<212> PRT
<213> Homo sapiens

<400> 797
Ile Gly Val Asn Tyr Leu Leu Leu Phe Phe Ile Phe
 1   5   10

<210> 798
<211> 19
<212> PRT
<213> Homo sapiens

<400> 798
Lys Leu Gly Phe Ser Thr Ile Leu Leu Leu Ser Ile Phe Ile Met Ser
 1   5   10   15

Glu Ala Asn

                              429

<210> 799
<211> 19
<212> PRT
<213> Homo sapiens

<400> 799
Lys Leu Gly Phe Ser Thr Ile Leu Leu Leu Ser Ile Phe Ile Met Ser
 1   5   10   15

Glu Ala Asn

<210> 800
<211> 23
<212> PRT
<213> Homo sapiens

<400> 800
Leu Cys Val Cys Thr Gly Cys Pro Gly Gly Pro Gln Ile Pro Phe
 1   5   10   15

Arg Trp Gln Thr Glu Arg Gly
             20

<210> 801
<211> 29
<212> PRT
<213> Homo sapiens

<400> 801
Val Cys Val Cys Val Cys Leu Ile Ala Arg Val Tyr Phe Cys Ile Tyr
 1   5   10   15

Val Cys Val Trp Leu His Gly Cys Ala Ser Val Cys Leu
             20   25

<210> 802
<211> 6
<212> PRT
<213> Homo sapiens

<400> 802
Val Leu Pro Ser Ala Ser
 1   5

<210> 803
<211> 35
<212> PRT
<213> Homo sapiens

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<220>
<221> SITE
<222> (10)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (27)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 803
Met Arg Ala Ser Gly Val Tyr Val Ser Xaa Cys Ser Phe Val Phe Met
 1               5                  10                  15

Cys Val Cys Val Cys Met Leu Asn Ser Arg Xaa Thr Phe Asp Tyr Gly
            20                  25                  30

Val Cys Gly
        35



<210> 804
<211> 56
<212> PRT
<213> Homo sapiens

<400> 804
Met Arg Ala Ser Gly Val Tyr Val Ser Glu Cys Ser Phe Val Phe Met
 1               5                  10                  15

Cys Val Cys Val Cys Met Ser Asp Cys Thr Gly Val Leu Leu Tyr Leu
            20                  25                  30

Cys Val Cys Val Val Ala Arg Val Cys Leu Cys Val Ser Leu Thr Leu
        35                  40                  45

Ala Gly Cys Val Cys Lys Ser Val
   50                  55



<210> 805
<211> 60
<212> PRT
<213> Homo sapiens

<400> 805
Met Ile Arg Ile Gln Phe Leu His Leu Phe Leu Trp Val Gly Phe Ile
 1               5                  10                  15

Phe Arg Gln Pro Pro Ser Ser Tyr Pro Gln Asp Gly Arg Asp Ser Pro
            20                  25                  30

Trp Ser Phe Pro Cys Arg Asp Arg Ser Pro Gly Asn Asn Thr Ser Ile
            35                  40                  45

Pro Ser His Glu Thr Val Leu Asn Phe Ile Leu Thr
        50                  55                  60
```

<210> 806
<211> 60
<212> PRT
<213> Homo sapiens

<400> 806
Met Ile Arg Ile Gln Phe Leu His Leu Phe Leu Trp Val Gly Phe Ile
1   5   10   15

Phe Arg Gln Pro Pro Ser Ser Tyr Pro Gln Asp Gly Arg Asp Ser Pro
                20   25   30

Trp Ser Phe Pro Cys Arg Asp Arg Ser Pro Gly Asn Asn Thr Ser Ile
            35   40   45

Pro Ser His Glu Thr Val Leu Asn Phe Ile Leu Thr
        50   55   60

<210> 807
<211> 444
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (92)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (95)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (97)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (98)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (101)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 807
Met Leu Gln Arg Ile Gly Leu Ile Phe Leu His Asn Ile Val Val Val
1   5   10   15

Ser Asn Cys Phe Tyr Phe Gln Ala Phe Leu Asp Glu Phe Thr Asn Trp
                20   25   30

432

Ser Arg Ile Asn Pro Asn Lys Ala Arg Ile Pro Met Ala Gly Asp Thr
        35   40   45

Gln Gly Val Val Gly Thr Val Ser Lys Pro Cys Phe Thr Ala Tyr Glu
    50   55   60

Met Lys Ile Gly Ala Ile Thr Phe Gln Val Ala Thr Gly Asp Ile Ala
65   70   75   80

Thr Glu Gln Val Asp Val Ile Val Asn Ser Thr Xaa Arg Thr Xaa Asn
            85   90   95

Xaa Xaa Ser Gly Xaa Ser Arg Ala Ile Leu Glu Gly Ala Gly Gln Ala
        100   105   110

Val Glu Ser Glu Cys Ala Val Leu Ala Ala Gln Pro His Arg Asp Phe
    115   120   125

Ile Ile Thr Pro Gly Gly Cys Leu Lys Cys Lys Ile Ile Ile His Val
    130   135   140

Pro Gly Gly Lys Asp Val Arg Lys Thr Val Thr Ser Val Leu Glu Glu
145   150   155   160

Cys Glu Gln Arg Lys Tyr Thr Ser Val Ser Leu Pro Ala Ile Gly Thr
            165   170   175

Gly Asn Ala Gly Lys Asn Pro Ile Thr Val Ala Asp Asn Ile Ile Asp
            180   185   190

Ala Ile Val Asp Phe Ser Ser Gln His Ser Thr Pro Ser Leu Lys Thr
    195   200   205

Val Lys Val Val Ile Phe Gln Pro Glu Leu Leu Asn Ile Phe Tyr Asp
    210   215   220

Ser Met Lys Lys Arg Asp Leu Ser Ala Ser Leu Asn Phe Gln Ser Thr
225   230   235   240

Phe Ser Met Thr Thr Cys Asn Leu Pro Glu His Trp Thr Asp Met Asn
            245   250   255

His Gln Leu Phe Cys Met Val Gln Leu Glu Pro Gly Gln Ser Glu Tyr
            260   265   270

Asn Thr Ile Lys Asp Lys Phe Thr Arg Thr Cys Ser Ser Tyr Ala Ile
    275   280   285

Glu Lys Ile Glu Arg Ile Gln Asn Ala Phe Leu Trp Gln Ser Tyr Gln
    290   295   300

Val Lys Lys Arg Gln Met Asp Ile Lys Asn Asp His Lys Asn Asn Glu
305   310   315   320

Arg Leu Leu Phe His Gly Thr Asp Ala Asp Ser Val Pro Tyr Val Asn
            325   330   335

Gln His Gly Phe Asn Arg Ser Cys Ala Gly Lys Asn Ala Val Ser Tyr
            340   345   350

433

```
Gly Lys Gly Thr Tyr Phe Ala Val Asp Ala Ser Tyr Ser Ala Lys Asp
        355             360             365

Thr Tyr Ser Lys Pro Asp Ser Asn Gly Arg Lys His Met Tyr Val Val
        370             375             380

Arg Val Leu Thr Gly Val Phe Thr Lys Gly Arg Ala Gly Leu Val Thr
385             390             395             400

Pro Pro Pro Lys Asn Pro His Asn Pro Thr Asp Leu Phe Asp Ser Val
            405             410             415

Thr Asn Asn Thr Arg Ser Pro Lys Leu Phe Val Val Phe Phe Asp Asn
            420             425             430

Gln Ala Tyr Pro Glu Tyr Leu Ile Thr Phe Thr Ala
        435             440
```

```
<210> 808
<211> 505
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (358)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (494)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (504)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (505)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 808
Met Phe Arg Thr Ala Val Met Met Ala Ala Ser Leu Ala Leu Thr Gly
  1             5               10              15

Ala Val Val Ala His Ala Tyr Tyr Leu Lys His Gln Phe Tyr Pro Thr
            20              25              30

Val Val Tyr Leu Thr Lys Ser Ser Pro Ser Met Ala Val Leu Tyr Ile
        35              40              45

Gln Ala Phe Val Leu Val Phe Leu Leu Gly Lys Val Met Gly Lys Val
    50              55              60

Phe Phe Gly Gln Leu Arg Ala Ala Glu Met Glu His Leu Leu Glu Arg
 65             70              75              80
```

Ser Trp Tyr Ala Val Thr Glu Thr Cys Leu Ala Phe Thr Val Phe Arg
                85   90   95

Asp Asp Phe Ser Pro Arg Phe Val Ala Leu Phe Thr Leu Leu Leu Phe
            100   105   110

Leu Lys Cys Phe His Trp Leu Ala Glu Asp Arg Val Asp Phe Met Glu
        115   120   125

Arg Ser Pro Asn Ile Ser Trp Leu Phe His Cys Arg Ile Val Ser Leu
    130   135   140

Met Phe Leu Leu Gly Ile Leu Asp Phe Leu Phe Val Ser His Ala Tyr
145   150   155   160

His Ser Ile Leu Thr Arg Gly Ala Ser Val Gln Leu Val Phe Gly Phe
                165   170   175

Glu Tyr Ala Ile Leu Met Thr Met Val Leu Thr Ile Phe Ile Lys Tyr
        180   185   190

Val Leu His Ser Val Asp Leu Gln Ser Glu Asn Pro Trp Asp Asn Lys
        195   200   205

Ala Val Tyr Met Leu Tyr Thr Glu Leu Phe Thr Gly Phe Ile Lys Val
    210   215   220

Leu Leu Tyr Met Ala Phe Met Thr Ile Met Ile Lys Val His Thr Phe
225   230   235   240

Pro Leu Phe Ala Ile Arg Pro Met Tyr Leu Ala Met Arg Gln Phe Lys
            245   250   255

Lys Ala Val Thr Asp Ala Ile Met Ser Arg Arg Ala Ile Arg Asn Met
            260   265   270

Asn Thr Leu Tyr Pro Asp Ala Thr Pro Glu Glu Leu Gln Ala Met Asp
        275   280   285

Asn Val Cys Ile Ile Cys Arg Glu Glu Met Val Thr Gly Ala Lys Arg
    290   295   300

Leu Pro Cys Asn His Ile Phe His Thr Ser Cys Leu Arg Ser Trp Phe
305   310   315   320

Gln Arg Gln Gln Thr Cys Pro Thr Cys Arg Met Asp Val Leu Arg Ala
            325   330   335

Ser Leu Pro Ala Gln Ser Pro Pro Pro Glu Pro Ala Asp Gln Gly
            340   345   350

Pro Pro Pro Ala Pro Xaa Pro Pro Pro Leu Leu Pro Gln Pro Pro Asn
        355   360   365

Phe Pro Gln Gly Leu Leu Pro Pro Phe Pro Pro Gly Met Phe Pro Leu
    370   375   380

Trp Pro Pro Met Gly Pro Phe Pro Pro Val Pro Pro Pro Pro Ser Ser
385   390   395   400

                                435

```
Gly Glu Ala Val Ala Pro Pro Ser Thr Ser Ala Ala Ala Leu Ser Arg
            405                 410                 415

Pro Ser Gly Ala Ala Thr Thr Thr Ala Ala Gly Thr Ser Ala Thr Ala
            420                 425                 430

Ala Ser Ala Thr Ala Ser Gly Pro Gly Ser Gly Ser Ala Pro Glu Ala
            435                 440                 445

Gly Pro Ala Pro Gly Phe Pro Phe Pro Pro Pro Trp Met Gly Met Pro
    450                 455                 460

Leu Pro Pro Pro Phe Ala Phe Pro Pro Met Pro Val Pro Pro Ala Gly
465                 470                 475                 480

Phe Ala Gly Leu Thr Pro Glu Glu Tyr Glu Leu Trp Arg Xaa Met Ser
            485                 490                 495

Gly Arg Thr Gly Gly Pro Val Xaa Xaa
            500                 505
```

```
<210> 809
<211> 191
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (18)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (21)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 809
Met Phe Arg Thr Ala Val Met Met Ala Ala Ser Ile Trp Pro Arg Leu
  1             5               10                  15

Trp Xaa Cys Pro Xaa Gly Trp Pro Cys Pro Trp Phe Pro Leu Pro Ser
            20                  25                  30

Ser Leu Asp Gly Tyr Ala Pro Ala Ser Thr Leu Cys Leu Pro Pro Asn
            35                  40                  45

Ala Cys Ala Pro Cys Gly Phe Ala Gly Leu Thr Pro Glu Glu Leu Arg
    50                  55                  60

Ala Leu Glu Gly His Glu Arg Gln His Leu Glu Ala Arg Leu Gln Ser
65                  70                  75                  80

Leu Arg Asn Ile His Thr Leu Leu Asp Ala Ala Met Leu Gln Ile Asn
            85                  90                  95

Gln Tyr Leu Thr Val Leu Ala Ser Leu Gly Pro Pro Arg Pro Ala Thr
            100                 105                 110
```

                                     436

Ser Val Asn Ser Thr Glu Glu Thr Ala Thr Thr Val Val Ala Ala Ala
        115   120   125

Ser Ser Thr Ser Ile Pro Ser Ser Glu Ala Thr Thr Pro Thr Pro Gly
    130   135   140

Ala Ser Pro Pro Ala Pro Glu Met Glu Arg Pro Pro Ala Pro Glu Ser
145   150   155   160

Val Gly Thr Glu Glu Met Pro Glu Asp Gly Glu Pro Asp Ala Ala Glu
                165   170   175

Leu Arg Arg Arg Arg Leu Gln Lys Leu Glu Ser Pro Val Ala His
                180   185   190

<210> 810
<211> 617
<212> PRT
<213> Homo sapiens

<400> 810
Met Phe Arg Thr Ala Val Met Met Ala Ala Ser Leu Ala Leu Thr Gly
  1   5   10   15

Ala Val Val Ala His Ala Tyr Tyr Leu Lys His Gln Phe Tyr Pro Thr
            20   25   30

Val Val Tyr Leu Thr Lys Ser Ser Pro Ser Met Ala Val Leu Tyr Ile
        35   40   45

Gln Ala Phe Val Leu Val Phe Leu Leu Gly Lys Val Met Gly Lys Val
    50   55   60

Phe Phe Gly Gln Leu Arg Ala Ala Glu Met Glu His Leu Leu Glu Arg
65   70   75   80

Ser Trp Tyr Ala Val Thr Glu Thr Cys Leu Ala Phe Thr Val Phe Arg
            85   90   95

Asp Asp Phe Ser Pro Arg Phe Val Ala Leu Phe Thr Leu Leu Leu Phe
            100   105   110

Leu Lys Cys Phe His Trp Leu Ala Glu Asp Arg Val Asp Phe Met Glu
        115   120   125

Arg Ser Pro Asn Ile Ser Trp Leu Phe His Cys Arg Ile Val Ser Leu
    130   135   140

Met Phe Leu Leu Gly Ile Leu Asp Phe Leu Phe Val Ser His Ala Tyr
145   150   155   160

His Ser Ile Leu Thr Arg Gly Ala Ser Val Gln Leu Val Phe Gly Phe
            165   170   175

Glu Tyr Ala Ile Leu Met Thr Met Val Leu Thr Ile Phe Ile Lys Tyr
            180   185   190

Val Leu His Ser Val Asp Leu Gln Ser Glu Asn Pro Trp Asp Asn Lys
        195   200   205

Ala Val Tyr Met Leu Tyr Thr Glu Leu Phe Thr Gly Phe Ile Lys Val
        210   215   220

Leu Leu Tyr Met Ala Phe Met Thr Ile Met Ile Lys Val His Thr Phe
225   230   235   240

Pro Leu Phe Ala Ile Arg Pro Met Tyr Leu Ala Met Arg Gln Phe Lys
                245   250   255

Lys Ala Val Thr Asp Ala Ile Met Ser Arg Arg Ala Ile Arg Asn Met
        260   265   270

Asn Thr Leu Tyr Pro Asp Ala Thr Pro Glu Glu Leu Gln Ala Met Asp
        275   280   285

Asn Val Cys Ile Ile Cys Arg Glu Glu Met Val Thr Gly Ala Lys Arg
        290   295   300

Leu Pro Cys Asn His Ile Phe His Thr Ser Cys Leu Arg Ser Trp Phe
305   310   315   320

Gln Arg Gln Gln Thr Cys Pro Thr Cys Arg Met Asp Val Leu Arg Ala
                325   330   335

Ser Leu Pro Ala Gln Ser Pro Pro Pro Pro Glu Pro Ala Asp Gln Gly
            340   345   350

Pro Pro Pro Ala Pro His Pro Pro Pro Leu Leu Pro Gln Pro Pro Asn
        355   360   365

Phe Pro Gln Gly Leu Leu Pro Pro Phe Pro Pro Gly Met Phe Pro Leu
    370   375   380

Trp Pro Pro Met Gly Pro Phe Pro Pro Val Pro Pro Pro Pro Ser Ser
385   390   395   400

Gly Glu Ala Val Ala Pro Pro Ser Thr Ser Ala Ala Ala Leu Ser Arg
            405   410   415

Pro Ser Gly Ala Ala Thr Thr Thr Ala Ala Gly Thr Ser Ala Thr Ala
            420   425   430

Ala Ser Ala Thr Ala Ser Gly Pro Gly Ser Gly Ser Ala Pro Glu Ala
        435   440   445

Gly Pro Ala Pro Gly Phe Pro Phe Pro Pro Pro Trp Met Gly Met Pro
    450   455   460

Leu Pro Pro Pro Phe Ala Phe Pro Pro Met Pro Val Pro Pro Ala Gly
465   470   475   480

Phe Ala Gly Leu Thr Pro Glu Glu Leu Arg Ala Leu Glu Gly His Glu
            485   490   495

Arg Gln His Leu Glu Ala Arg Leu Gln Ser Leu Arg Asn Ile His Thr
        500   505   510

438

Leu Leu Asp Ala Ala Met Leu Gln Ile Asn Gln Tyr Leu Thr Val Leu
        515   520   525

Ala Ser Leu Gly Pro Pro Arg Pro Ala Thr Ser Val Asn Ser Thr Glu
        530   535   540

Glu Thr Ala Thr Thr Val Val Ala Ala Ala Ser Ser Thr Ser Ile Pro
545   550   555   560

Ser Ser Glu Ala Thr Thr Pro Thr Pro Gly Ala Ser Pro Pro Ala Pro
                565   570   575

Glu Met Glu Arg Pro Pro Ala Pro Glu Ser Val Gly Thr Glu Glu Met
            580   585   590

Pro Glu Asp Gly Glu Pro Asp Ala Ala Glu Leu Arg Arg Arg Arg Leu
        595   600   605

Gln Lys Leu Glu Ser Pro Val Ala His
    610   615

<210> 811
<211> 20
<212> PRT
<213> Homo sapiens

<400> 811
Met Asn Val Arg Leu Val Leu Asn Pro Phe Pro Leu Tyr Ser Val Tyr
    1   5   10   15

Val Ile Pro Asn
            20

<210> 812
<211> 11
<212> PRT
<213> Homo sapiens

<400> 812
Leu Glu Ile Leu Val Val Lys Lys Leu Leu Ala
    1   5   10

<210> 813
<211> 20
<212> PRT
<213> Homo sapiens

<400> 813
Met Asn Val Arg Leu Val Leu Asn Pro Phe Pro Leu Tyr Ser Val Tyr
    1   5   10   15

Val Ile Pro Asn
            20

439

<210> 814
<211> 62
<212> PRT
<213> Homo sapiens

<400> 814
Met Leu Cys Pro Ala Leu Gly Pro Phe Leu Leu Phe Leu Leu Ser Ser
 1   5   10   15

Thr Leu Met Ala Ser Phe Met Gly Asp Thr Pro Cys His Pro Gly Glu
            20   25   30

Leu Ser Ala Phe Gly Val Ala Pro Ser Arg Val Phe Thr Ser Ser Phe
        35   40   45

Leu Phe Thr Val Phe Thr Pro Ser Tyr Pro Ser Leu Pro Gly
    50   55   60

<210> 815
<211> 62
<212> PRT
<213> Homo sapiens

<400> 815
Met Leu Cys Pro Ala Leu Gly Pro Phe Leu Leu Phe Leu Leu Ser Ser
 1   5   10   15

Thr Leu Met Ala Ser Phe Met Gly Asp Thr Pro Cys His Pro Gly Glu
            20   25   30

Leu Ser Ala Phe Gly Val Ala Pro Ser Arg Val Phe Thr Ser Ser Phe
        35   40   45

Leu Phe Thr Val Phe Thr Pro Ser Tyr Pro Ser Leu Pro Gly
    50   55   60

<210> 816
<211> 51
<212> PRT
<213> Homo sapiens

<400> 816
Gln Ala Ser Trp Val Trp Trp Leu Thr Thr Val Ile Pro Ala Leu Trp
 1   5   10   15

Glu Ala Arg Ala Gly Gly Ser Leu Glu Pro Arg Ser Ser Arg Leu Ala
            20   25   30

Trp Ala Thr Gln Lys Val Phe Ile Ser Lys Lys Lys Lys Lys Lys Lys
        35   40   45

Arg Ala Ala
    50

440

<210> 817
<211> 19
<212> PRT
<213> Homo sapiens

<400> 817
Leu Val Cys Phe Val Ile Phe Arg Leu Trp Tyr Met Cys Val Phe Thr
 1   5   10   15

Leu Trp Ala

<210> 818
<211> 4
<212> PRT
<213> Homo sapiens

<400> 818
Phe Leu Ser Ser
 1

<210> 819
<211> 53
<212> PRT
<213> Homo sapiens

<400> 819
Met Phe Ile Ser Leu Phe Ile Phe Gly Leu Val Arg Leu Trp Pro Cys
 1   5   10   15

Cys Val Val Ile Tyr Phe Val Tyr Ser Ile Cys Lys His Gln Cys Ser
              20   25   30

Gln Glu Ala His Ser Ser Ile Phe Asn Cys Lys Phe Val Ser Gln Ser
          35   40   45

Gln Phe Ser Ile Met
      50

<210> 820
<211> 53
<212> PRT
<213> Homo sapiens

<400> 820
Met Phe Ile Ser Leu Phe Ile Phe Gly Leu Val Arg Leu Trp Pro Cys
 1   5   10   15

Cys Val Val Ile Tyr Phe Val Tyr Ser Ile Cys Lys His Gln Cys Ser
              20   25   30

Gln Glu Ala His Ser Ser Ile Phe Asn Cys Lys Phe Val Ser Gln Ser

441

                    - 35   40   45

        Gln Phe Ser Ile Met
              50

        <210> 821
        <211> 283
        <212> PRT
        <213> Homo sapiens

        <400> 821
        Met Ile Phe Leu Leu Leu Met Leu Ser Leu Glu Leu Gln Leu His Gln
         1   5   10   15

        Ile Ala Ala Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile
                      20   25   30

        Glu His Gly Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser
                  35   40   45

        His Val Asn Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn
              50   55   60

        Asp Thr Ser Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu
         65   70   75   80

        Pro Leu Gly Lys Ala Ser Phe His Ile Pro Gln Val Gln Val Arg Asp
                      85   90   95

        Glu Gly Gln Tyr Gln Cys Ile Ile Ile Tyr Gly Val Ala Trp Asp Tyr
                     100   105   110

        Lys Tyr Leu Thr Leu Lys Val Lys Ala Ser Tyr Arg Lys Ile Asn Thr
                     115   120   125

        His Ile Leu Lys Val Pro Glu Thr Asp Glu Val Glu Leu Thr Cys Gln
             130   135   140

        Ala Thr Gly Tyr Pro Leu Ala Glu Val Ser Trp Pro Asn Val Ser Val
        145   150   155   160

        Pro Ala Asn Thr Ser His Ser Arg Thr Pro Glu Gly Leu Tyr Gln Val
                     165   170   175

        Thr Ser Val Leu Arg Leu Lys Pro Pro Pro Gly Arg Asn Phe Ser Cys
                     180   185   190

        Val Phe Trp Asn Thr His Val Arg Glu Leu Thr Leu Ala Ser Ile Asp
                     195   200   205

        Leu Gln Ser Gln Met Glu Pro Arg Thr His Pro Thr Trp Leu Leu His
             210   215   220

        Ile Phe Ile Pro Ser Cys Ile Ile Ala Phe Ile Phe Ile Ala Thr Val
        225   230   235   240

        Ile Ala Leu Arg Lys Gln Leu Cys Gln Lys Leu Tyr Ser Ser Lys Asp
                     245   250   255

                                    442

Thr Thr Lys Arg Pro Val Thr Thr Thr Lys Arg Glu Val Asn Ser Ala
        260   265   270

Val Asn Leu Asn Leu Trp Ser Trp Glu Pro Gly
        275   280

<210> 822
<211> 93
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (89)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (92)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 822
Met Ile Phe Leu Leu Leu Met Leu Ser Leu Glu Leu Gln Leu His Gln
  1   5   10   15

Ile Ala Ala Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile
            20   25   30

Glu His Gly Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser
            35   40   45

His Val Asn Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn
        50   55   60

Asp Thr Ser Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu
 65   70   75   80

Pro Leu Gly Lys Ala Ser Phe Pro Xaa Leu Lys Xaa Lys
                85   90

<210> 823
<211> 23
<212> PRT
<213> Homo sapiens

<400> 823
Leu Phe Leu Leu Leu Glu Ile Ser Thr His Leu Cys Phe Trp Lys Ser
  1   5   10   15

Leu Arg Lys Leu Glu Gly Lys
                20

<210> 824

443

<211> 46
<212> PRT
<213> Homo sapiens

<400> 824
Met Pro Trp Leu Lys Ser Leu Leu His Phe Ser Leu Phe Leu Val Val
1   5   10   15

Phe Ser Thr Leu Ala Val Lys Ser Leu Gly Val Pro Val Ala Ala Gly
            20   25   30

Ser Pro Phe Cys Ile Val Asp Val Leu His Phe Ile Leu Leu
        35   40   45

<210> 825
<211> 46
<212> PRT
<213> Homo sapiens

<400> 825
Met Pro Trp Leu Lys Ser Leu Leu His Phe Ser Leu Phe Leu Val Val
1   5   10   15

Phe Ser Thr Leu Ala Val Lys Ser Leu Gly Val Pro Val Ala Ala Gly
            20   25   30

Ser Pro Phe Cys Ile Val Asp Val Leu His Phe Ile Leu Leu
        35   40   45

<210> 826
<211> 67
<212> PRT
<213> Homo sapiens

<400> 826
Met Asp Arg Gly Val Met Cys Leu Leu Ala Ser Trp Pro Gly Leu Gly
1   5   10   15

Ala Gln Phe Cys Gly Ala Gly Val Cys Pro Leu Arg Val Pro Ser Leu
            20   25   30

Glu Pro Thr Leu Pro Asn Asp Gly Gly Gly Leu Glu Ala Leu Thr Leu
        35   40   45

Gly Gly Lys Glu Ala Lys Glu Arg Trp Arg Trp Lys Gly Arg Pro Gly
    50   55   60

Gln Gly Gly
65

<210> 827
<211> 83
<212> PRT
<213> Homo sapiens

444

<400> 827
Gly His Val Leu Ala Tyr Ser Ser Trp Pro Ser Leu Ala Pro Gly Leu
  1   5   10   15

Ser Val Gln Tyr Phe Val Ser Arg Val Glu Val Pro Asn Pro Gly Cys
              20   25   30

Thr Leu Glu Ala Pro Gly Lys Leu Ser Glu Phe Leu Arg Pro Glu Pro
          35   40   45

His Pro Lys Pro Ile Ser Ser Glu Ser Leu Gly Gly Thr Glu Pro Gly
      50   55   60

Phe Cys Gln Leu Lys Pro Ala Met Val Thr Ser Val Ser Ser Tyr Thr
65   70   75   80

Glu Asn Ser

<210> 828
<211> 67
<212> PRT
<213> Homo sapiens

<400> 828
Met Asp Arg Gly Val Met Cys Leu Leu Ala Ser Trp Pro Gly Leu Gly
  1   5   10   15

Ala Gln Phe Cys Gly Ala Gly Val Cys Pro Leu Arg Val Pro Ser Leu
              20   25   30

Glu Pro Thr Leu Pro Asn Asp Gly Gly Gly Leu Glu Ala Leu Thr Leu
          35   40   45

Gly Gly Lys Glu Ala Lys Glu Arg Trp Arg Trp Lys Gly Arg Pro Gly
      50   55   60

Gln Gly Gly
65

<210> 829
<211> 83
<212> PRT
<213> Homo sapiens

<400> 829
Gly His Val Leu Ala Tyr Ser Ser Trp Pro Ser Leu Ala Pro Gly Leu
  1   5   10   15

Ser Val Gln Tyr Phe Val Ser Arg Val Glu Val Pro Asn Pro Gly Cys
              20   25   30

Thr Leu Glu Ala Pro Gly Lys Leu Ser Glu Phe Leu Arg Pro Glu Pro
          35   40   45

His Pro Lys Pro Ile Ser Ser Glu Ser Leu Gly Gly Thr Glu Pro Gly
        50   55   60

Phe Cys Gln Leu Lys Pro Ala Met Val Thr Ser Val Ser Ser Tyr Thr
65   70   75   80

Glu Asn Ser

<210> 830
<211> 66
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (9)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 830
Ser Trp Val Asp Phe Asp Cys Val Xaa Glu Val Ser Tyr Leu Asn Ser
  1   5   10   15

Gly Ser Tyr Ser Leu Val Leu His Leu Glu Gly Leu His Pro Leu Glu
            20   25   30

Leu Ser Gly Lys Leu Ala Ile Asp Phe Gly Lys Lys Arg Glu Phe Cys
            35   40   45

Val Asp Gly Val Gly Gly Ala Thr Leu Val Ile Cys Pro Gly Phe Gln
        50   55   60

Asp Phe
65

<210> 831
<211> 61
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (13)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 831
Met Trp Tyr Val Cys Ala Cys Val Cys Val Cys Val Xaa Val Cys Ser
  1   5   10   15

Tyr Asn Arg Arg Thr Gly Lys Val Arg Thr Gln Asn Asn Glu Asp Leu
            20   25   30

Leu Lys Cys Gly Gly Gly Val Cys Val Cys Val Phe Ile Glu Gln Glu
            35   40   45

Asp Arg Lys Gly Asn Asp His Pro Trp Lys Met Lys Gly

446

50   55   60

<210> 832
<211> 11
<212> PRT
<213> Homo sapiens

<400> 832
Val Cys Cys Cys Leu His Leu Asn Ala Phe Val
1   5   10

<210> 833
<211> 716
<212> PRT
<213> Homo sapiens

<400> 833
Met Asn Asn Phe Arg Ala Thr Ile Leu Phe Trp Ala Ala Ala Ala Trp
1   5   10   15

Ala Lys Ser Gly Lys Pro Ser Gly Glu Met Asp Glu Val Gly Val Gln
            20   25   30

Lys Cys Lys Asn Ala Leu Lys Leu Pro Val Leu Glu Val Leu Pro Gly
        35   40   45

Gly Gly Trp Asp Asn Leu Arg Asn Val Asp Met Gly Arg Val Met Glu
    50   55   60

Leu Thr Tyr Ser Asn Cys Arg Thr Thr Glu Asp Gly Gln Tyr Ile Ile
65   70   75   80

Pro Asp Glu Ile Phe Thr Ile Pro Gln Lys Gln Ser Asn Leu Glu Met
                85   90   95

Asn Ser Glu Ile Leu Glu Ser Trp Ala Asn Tyr Gln Ser Ser Thr Ser
            100   105   110

Tyr Ser Ile Asn Thr Glu Leu Ser Leu Phe Ser Lys Val Asn Gly Lys
        115   120   125

Phe Ser Thr Glu Phe Gln Arg Met Lys Thr Leu Gln Val Lys Asp Gln
    130   135   140

Ala Ile Thr Thr Arg Val Gln Val Arg Asn Leu Val Tyr Thr Val Lys
145   150   155   160

Ile Asn Pro Thr Leu Glu Leu Ser Ser Gly Phe Arg Lys Glu Leu Leu
                165   170   175

Asp Ile Ser Asp Arg Leu Glu Asn Asn Gln Thr Arg Met Ala Thr Tyr
            180   185   190

Leu Ala Glu Leu Leu Val Leu Asn Tyr Gly Thr His Val Thr Thr Ser
        195   200   205

447

Val Asp Ala Gly Ala Ala Leu Ile Gln Glu Asp His Leu Arg Ala Ser
    210   215   220

Phe Leu Gln Asp Ser Gln Ser Ser Arg Ser Ala Val Thr Ala Ser Ala
225   230   235   240

Gly Leu Ala Phe Gln Asn Thr Val Asn Phe Lys Phe Glu Glu Asn Tyr
                245   250   255

Thr Ser Gln Asn Val Leu Thr Lys Ser Tyr Leu Ser Asn Arg Thr Asn
                260   265   270

Ser Arg Val Gln Ser Ile Gly Gly Val Pro Phe Tyr Pro Gly Ile Thr
                275   280   285

Leu Gln Ala Trp Gln Gln Gly Ile Thr Asn His Leu Val Ala Ile Asp
    290   295   300

Arg Ser Gly Leu Pro Leu His Phe Phe Ile Asn Pro Asn Met Leu Pro
305   310   315   320

Asp Leu Pro Gly Pro Leu Val Lys Lys Val Ser Lys Thr Val Glu Thr
                325   330   335

Ala Val Lys Arg Tyr Tyr Thr Phe Asn Thr Tyr Pro Gly Cys Thr Asp
                340   345   350

Leu Asn Ser Pro Asn Phe Asn Phe Gln Ala Asn Thr Asp Asp Gly Ser
                355   360   365

Cys Glu Gly Lys Met Thr Asn Phe Ser Phe Gly Gly Val Tyr Gln Glu
    370   375   380

Cys Thr Gln Leu Ser Gly Asn Arg Asp Val Leu Leu Cys Gln Lys Leu
385   390   395   400

Glu Gln Lys Asn Pro Leu Thr Gly Asp Phe Ser Cys Pro Ser Gly Tyr
                405   410   415

Ser Pro Val His Leu Leu Ser Gln Ile His Glu Glu Gly Tyr Asn His
                420   425   430

Leu Glu Cys His Arg Lys Cys Thr Leu Leu Val Phe Cys Lys Thr Val
    435   440   445

Cys Glu Asp Val Phe Gln Val Ala Lys Ala Glu Phe Arg Ala Phe Trp
    450   455   460

Cys Val Ala Ser Ser Gln Val Pro Glu Asn Ser Gly Leu Leu Phe Gly
465   470   475   480

Gly Leu Phe Ser Ser Lys Ser Ile Asn Pro Met Thr Asn Ala Gln Ser
                485   490   495

Cys Pro Ala Gly Tyr Phe Pro Leu Arg Leu Phe Glu Asn Leu Lys Val
            500   505   510

Cys Val Ser Gln Asp Tyr Glu Leu Gly Ser Arg Phe Ala Val Pro Phe
            515   520   525

448

Gly Gly Phe Phe Ser Cys Thr Val Gly Asn Pro Leu Val Asp Pro Ala
    530   535   540

Ile Ser Arg Asp Leu Gly Ala Pro Ser Leu Lys Lys Cys Pro Gly Gly
545   550   555   560

Phe Ser Gln His Pro Ala Leu Ile Ser Asp Gly Cys Gln Val Ser Tyr
                565   570   575

Cys Val Lys Ser Gly Leu Phe Thr Gly Gly Ser Leu Pro Pro Ala Arg
            580   585   590

Leu Pro Pro Phe Thr Arg Pro Pro Leu Met Ser Gln Ala Ala Thr Asn
        595   600   605

Thr Val Ile Val Thr Asn Ser Glu Asn Ala Arg Ser Trp Ile Lys Asp
    610   615   620

Ser Gln Thr His Gln Trp Arg Leu Gly Glu Pro Ile Glu Leu Arg Arg
625   630   635   640

Ala Met Asn Val Ile His Gly Asp Gly Gly Leu Ser Gly Gly Ala
                645   650   655

Ala Ala Gly Val Thr Val Gly Val Thr Thr Ile Leu Ala Val Val Ile
            660   665   670

Thr Leu Ala Ile Tyr Gly Thr Arg Lys Phe Lys Lys Lys Ala Tyr Gln
    675   680   685

Ala Ile Glu Glu Arg Gln Ser Leu Val Pro Gly Thr Ala Ala Thr Gly
    690   695   700

Asp Thr Thr Tyr Gln Glu Gln Gly Gln Ser Pro Ala
705   710   715

<210> 834
<211> 94
<212> PRT
<213> Homo sapiens

<400> 834
Leu Ala Val Ile Met Ala Arg Pro Ala Ala Glu Pro Leu Cys Phe Leu
1   5   10   15

Asn Pro Lys Leu Leu Ala Leu Ala Val Gly Val Leu Glu Leu Leu Gly
        20   25   30

Arg Gly Phe Leu Asp Ser Ser Pro Leu Leu Arg Pro Ala Ser Asp Gly
        35   40   45

Glu Arg Phe Thr Trp Glu Ala Leu Gly Glu Ser Leu Pro Phe Ser Asp
    50   55   60

Thr Phe Ala Ser Ser Val Phe Pro Val Pro Gly Val Phe Ser Ala Pro
65   70   75   80

Ala Gly Ala Glu Ala Phe Val Leu Gly Met Val Met Pro Thr

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<210> 835
<211> 39
<212> PRT
<213> Homo sapiens

<400> 835
Met His Leu Leu Pro Trp Arg Ala Ala Ala Ala Pro Pro Leu Leu Ile
 1               5                  10                  15

Ala Val Pro Pro Arg Pro Ser Arg Ser Pro Val Gln Pro Pro Ser Leu
            20                  25                  30

Gly Ala Ala Asn Pro Ser Ala
        35


<210> 836
<211> 9
<212> PRT
<213> Homo sapiens

<400> 836
Pro Ser Ala Ala Ala Ser Ala Thr Pro
 1               5


<210> 837
<211> 63
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (12)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (16)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (20)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (23)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (25)
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (35)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (38)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (48)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (49)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 837
Met His Leu Leu Pro Trp Arg Ala Ala Ala Ala Xaa Pro Leu Leu Xaa
 1   5   10   15

Ala Val Pro Xaa Arg Ala Xaa Arg Xaa Pro Val Gln Ala Pro Ser Leu
            20   25   30

Gly Ala Xaa Asn Pro Xaa Arg Gly Thr Gln Val Ala Thr Val Ser Xaa
            35   40   45

Xaa Ser Gly Lys Leu Leu Gly Leu Lys Ala Pro Arg Pro Lys Pro
    50   55   60

<210> 838
<211> 84
<212> PRT
<213> Homo sapiens

<400> 838
Thr Tyr Ser Phe Cys Val Cys Glu Arg Ala Phe Val Phe Gly Ser Val
 1   5   10   15

Pro Arg Ala Glu Val Glu Gln Gly Cys Thr Tyr His Gly Lys Gly Gly
            20   25   30

Arg Lys Glu Asn Trp Ile Ala Cys Asp Leu Trp Trp Asn Leu Phe Leu
            35   40   45

Leu Pro Arg Pro Phe Arg Pro Cys Leu Ile Ser Val Gly His Phe Arg
    50   55   60

Leu Trp Gln Gly Arg Ala Gly Leu Gln Ser Glu Val Pro Ala Ser Ser
 65   70   75   80

Leu Glu His Asn

```
<210> 839
<211> 77
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (8)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (9)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (10)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (16)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 839
Leu Gly Gly Tyr Ala Leu Ser Xaa Xaa Xaa Asn Arg Val Thr Asp Xaa
 1               5               10              15

Val Met Ile Tyr Phe Phe Ile Ile Ile Val Glu Tyr Phe Tyr Gly Lys
             20              25              30

Ile Phe Val Val Leu Ile Ile Pro Ile Lys Ile Met Pro Asn Thr Lys
         35              40              45

Tyr Glu Phe Tyr Asp Val His Phe Val Leu Gly Ile Lys Arg Lys Lys
     50              55              60

His Thr Ser Trp Lys Ser Val Ser Cys Phe Leu Leu Leu
65              70              75


<210> 840
<211> 184
<212> PRT
<213> Homo sapiens

<400> 840
Met Ser Arg Thr Ala Tyr Thr Val Gly Ala Leu Leu Leu Leu Leu Gly
 1               5               10              15

Thr Leu Leu Pro Ala Ala Glu Gly Lys Lys Lys Gly Ser Gln Gly Ala
             20              25              30

Ile Pro Pro Pro Asp Lys Ala Gln His Asn Asp Ser Glu Gln Thr Gln
         35              40              45
```

452

```
Ser Pro Gln Gln Pro Gly Ser Arg Asn Arg Gly Arg Gly Gln Gly Arg
    50                  55                  60

Gly Thr Ala Met Pro Gly Glu Glu Val Leu Glu Ser Ser Gln Glu Ala
65              70                  75                      80

Leu His Val Thr Glu Arg Lys Tyr Leu Lys Arg Asp Trp Cys Lys Thr
                85                  90                      95

Gln Pro Leu Lys Gln Thr Ile His Glu Glu Gly Cys Asn Ser Arg Thr
            100                 105                 110

Ile Ile Asn Arg Phe Cys Tyr Gly Gln Cys Asn Ser Phe Tyr Ile Pro
        115                 120                 125

Arg His Ile Arg Lys Glu Glu Gly Ser Phe Gln Ser Cys Ser Phe Cys
    130                 135                 140

Lys Pro Lys Lys Phe Thr Thr Met Met Val Thr Leu Asn Cys Pro Glu
145                 150                 155                 160

Leu Gln Pro Pro Thr Lys Lys Lys Arg Val Thr Arg Val Lys Gln Cys
                165                 170                 175

Arg Cys Ile Ser Ile Asp Leu Asp
                180
```

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<210> 841
<211> 87
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (1)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (26)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 841
Xaa His Ser His Trp Glu Gly Leu Lys Leu Cys Cys Leu Asn Pro Val
1               5                   10                  15

Leu Gly Pro Ala Arg Lys Arg Lys Arg Xaa Leu Arg Asn Arg Gly Ala
            20                  25                  30

Arg Gly Gly Cys Arg Cys His Ser Arg Ala Ala Leu His Pro His Pro
        35                  40                  45

His Ala Ser Cys Phe Thr Ala His Ser Val Thr Glu Leu Val Ala Leu
    50                  55                  60

Gly Thr Gly Gly His Pro His Thr Leu Met Pro Thr Ala Glu Gly Arg
65                  70                  75                  80
```

Ala Thr His Pro Ser Arg Asp
                85

<210> 842
<211> 77
<212> PRT
<213> Homo sapiens

<400> 842
Phe Val Leu Leu His Cys Leu Asn Ser His Leu His Leu Ala Leu Gln
 1   5   10   15

Phe Pro Leu Asn Thr Leu Ser Ser Pro Leu Val Cys Cys Gln Ser Ala
             20   25   30

Ala Leu Pro Ile Lys Ala Cys Ile Asn Tyr Ile Cys Pro Met Phe Thr
         35   40   45

Phe Ile Lys His Phe Pro Cys Thr Pro Val Pro Thr Ser Gln Gln Thr
     50   55   60

Arg Glu Arg Ala Val Gln Leu Met Ser Leu Pro Ser Phe
65   70   75

<210> 843
<211> 41
<212> PRT
<213> Homo sapiens

<400> 843
Met Ala Phe Pro Arg Val Gly Ala Phe Leu Phe Leu Ala Ser Leu Ser
 1   5   10   15

Ser Leu Leu His Cys Arg Leu Leu Ala Glu Ala Val Ser Gly Arg Ser
             20   25   30

Val Ser Leu Ala Pro Ser Ile Ile Arg
         35   40

<210> 844
<211> 164
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (95)
<223> Xaa equals any of the naturally occurring L-amino acids

454

<400> 844
Arg Met Xaa Cys Ser Gln Pro Pro Arg Cys His Phe Gln Ser Asp Phe
 1   5   10   15

Gln Lys Cys Ala Pro Cys Pro Arg Ala Gln Thr His Trp Leu Glu Pro
            20   25   30

Pro Gly Arg Val Gln Thr Ile Ser Ser Met Arg Asn Ala Gln Lys Gly
        35   40   45

Phe Ala Asp Ser Ile Arg Leu Trp Arg Leu Pro Ala Ser Gly Val Gly
    50   55   60

Trp Val Val Ser Pro Pro Ile Gln Thr Gln Glu Val Ala Pro Glu Gly
65   70   75   80

Met Tyr Leu Val Gly Ser Ser Ser Gly Thr Leu Gly Gly Cys Xaa Ala
            85   90   95

Leu Thr Gln Tyr Phe Ser Leu Ser Pro Leu Trp Gly Ala Cys Val Arg
            100   105   110

Ala Arg Val Leu Ala Tyr Ala Phe Leu Cys Gly His Ile Arg Met Pro
        115   120   125

Leu Gly Glu His Val His Val Ser Pro Pro Glu Arg Ala Cys Val Cys
    130   135   140

Ala Pro Leu Arg Pro Arg Phe Gly Arg Leu Gly Phe Gly Val Pro Val
145   150   155   160

Phe Cys Pro Pro

<210> 845
<211> 80
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (25)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 845
Met Gly Thr Ser Thr Ala Trp Arg Val Pro Trp Arg Arg Trp Ala Arg
 1   5   10   15

Val Arg Cys Trp Trp Leu Trp Pro Xaa Thr Gly Thr Ala Glu Pro Pro
            20   25   30

Gly Thr Ala Gly Trp Gln Gly Leu Ala Gly Gly Arg Cys Arg Glu Ala
            35   40   45

Trp Gly Ser Leu Leu Met Gly Met Phe Gly Leu Cys Phe Leu Pro Val
    50   55   60

```
His Ser Gln Ser Cys Leu Ser Ser Ser Ser Ser Pro Thr Pro Arg Pro
65              70              75                  80
```

<210> 846.
<211> 53
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (4)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (10)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (27)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 846

```
Ile Gly Pro Xaa Gly Pro Arg Asn Ser Xaa Thr Gly Gly Ala Phe Leu
1           5               10              15

Asp Phe Ser Ala Gln Ala Lys Lys Lys Lys Xaa Gln Phe Leu Lys Ile
            20              25              30

Phe Phe Pro Gly Leu Cys Lys Ser Leu Ile Tyr Gly Ile Phe Val Met
            35              40              45

Gln Arg Asn Thr Leu
        50
```

<210> 847
<211> 50
<212> PRT
<213> Homo sapiens

<400> 847

```
Met Glu Glu Val Ala Phe Met Val Leu Lys Tyr Val Leu Pro Phe Leu
1           5               10              15

Lys Ser Leu Trp Leu His Val Tyr Leu Leu Ala Val Leu Trp Pro Arg
            20              25              30

Leu Ala Ser Met Ile Ser Phe Gly Ser Arg Leu Phe Gln Ile Val Asp
            35              40              45

Gly Ala
    50
```

<210> 848
<211> 86
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (5)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (6)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 848
Lys Lys Xaa Pro Xaa Xaa Leu Ser Gly Ser Lys Ala Ile Ala Ser Lys
 1   5   10   15

Thr Lys Glu Ile Glu Gln Val Tyr Arg Gln Asp Cys Glu Thr Phe Gly
            20   25   30

Met Val Val Lys Met Leu Ile Glu Lys Asp Pro Ser Leu Glu Lys Ser
        35   40   45

Ile Gln Phe Ala Leu Arg Gln Asn Leu His Glu Ile Gly Glu Arg Cys
    50   55   60

Val Glu Glu Leu Lys His Phe Ile Ala Glu Tyr Asp Thr Ser Thr Gln
65   70   75   80

Asp Phe Gly Glu Pro Phe
                85

<210> 849
<211> 129
<212> PRT
<213> Homo sapiens

<400> 849
Arg Lys Val Glu Gly Gly Ala Ser Gly Leu Asn Gly Phe Pro Asn His
 1   5   10   15

Pro Ser Ser Leu Gly Pro Ala Trp Phe Pro Pro Leu Pro Leu Pro Ser
            20   25   30

Thr Leu Ser Arg Thr Gly Leu Met Lys Ala Leu Pro Lys Ile Ser Pro
        35   40   45

Thr Pro Asn Phe Pro Leu Pro Pro Thr Phe Pro Thr Ser Ser Thr Thr

457

```
          50                 55                 60

Leu Phe Gly Ala Thr Ala Gly Pro Glu Ala Gln Ser Ala Val Ser Gln
65                  70                  75                  80

Ala Phe Val His Leu Ser Pro Gln Ser Ile Ser Val Leu Gly Glu Ser
                85                  90                  95

His Thr Glu Thr Gln Glu His Pro Leu Pro Glu Leu Arg Glu Val Leu
                100                 105                 110

Ser Leu Arg Gly Gly Leu Ser Ala Val Cys Asn Asn Val Val Leu Phe
            115                 120                 125

Ile
```

```
<210> 850
<211> 48
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (45)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (46)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (48)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 850
Met Val Gln Arg Leu Trp Val Ser Arg Leu Leu Arg His Arg Lys Ala
 1               5                  10                  15

Gln Leu Leu Leu Val Asn Leu Leu Thr Phe Gly Leu Glu Val Cys Leu
            20                  25                  30

Ala Ala Gly Phe Thr Tyr Val Pro Leu Cys Cys Gly Xaa Xaa Val Xaa
            35                  40                  45
```

```
<210> 851
<211> 12
<212> PRT
<213> Homo sapiens

<400> 851
```

```
Ile Leu Gln Arg Arg Lys Gln Arg Leu Leu Arg Gly
  1           5                    10
```

<210> 852
<211> 371
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (20)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 852
```
Met Leu Phe Pro Ser Phe Ser Arg Ser Leu Val Pro Leu Pro His Ala
  1           5                   10                  15

Leu Tyr Leu Xaa Gln Pro Leu Thr His Thr Thr Ser Leu Leu Ala Gly
             20              25                  30

Ile Gly Pro Val Leu Gly Leu Val Cys Val Pro Leu Leu Gly Ser Ala
         35              40                  45

Ser Asp His Trp Arg Gly Arg Tyr Gly Arg Arg Arg Pro Phe Ile Trp
     50              55                  60

Ala Leu Ser Leu Gly Ile Leu Leu Ser Leu Phe Leu Ile Pro Arg Ala
  65              70                  75                  80

Gly Trp Leu Ala Gly Leu Leu Cys Pro Asp Pro Arg Pro Leu Glu Leu
             85                  90                  95

Ala Leu Leu Ile Leu Gly Val Gly Leu Leu Asp Phe Cys Gly Gln Val
             100                 105                 110

Cys Phe Thr Pro Leu Glu Ala Leu Leu Ser Asp Leu Phe Arg Asp Pro
     115                 120                 125

Asp His Cys Arg Gln Ala Tyr Ser Val Tyr Ala Phe Met Ile Ser Leu
     130                 135                 140

Gly Gly Cys Leu Gly Tyr Leu Leu Pro Ala Ile Asp Trp Asp Thr Ser
145                 150                 155                 160

Ala Leu Ala Pro Tyr Leu Gly Thr Gln Glu Glu Cys Leu Phe Gly Leu
                 165                 170                 175

Leu Thr Leu Ile Phe Leu Thr Cys Val Ala Ala Thr Leu Leu Val Ala
             180                 185                 190

Glu Glu Ala Ala Leu Gly Pro Thr Glu Pro Ala Glu Gly Leu Ser Ala
         195                 200                 205

Pro Ser Leu Ser Pro His Cys Cys Pro Cys Arg Ala Arg Leu Ala Phe
     210                 215                 220

Arg Asn Leu Gly Ala Leu Leu Pro Arg Leu His Gln Leu Cys Cys Arg
225                 230                 235                 240
```

459

Met Pro Arg Thr Leu Arg Arg Leu Phe Val Ala Glu Leu Cys Ser Trp
        245   250   255

Met Ala Leu Met Thr Phe Thr Leu Phe Tyr Thr Asp Phe Val Gly Glu
            260   265   270

Gly Leu Tyr Gln Gly Val Pro Arg Ala Glu Pro Gly Thr Glu Ala Arg
        275   280   285

Arg His Tyr Asp Glu Gly Lys Ala Leu Ala Ala Ser Arg Gly Trp Cys
    290   295   300

Gly Ser Arg Pro Pro Glu Thr Thr Leu Gly Ala Val Ser Gly Leu Val
305   310   315   320

Pro Leu His Pro Gly Pro Asp Phe Ser Val Arg Lys Val Gly Met Asp
            325   330   335

Pro Ile Cys Ile His Gly Phe Ser Trp Val Trp Asn Ile Ser Ala Cys
            340   345   350

Gly Phe Arg Lys Ala Ser Gly Cys Ser Arg Ser Leu Ile Arg Val Val
        355   360   365

Ala Pro Val
    370

<210> 853
<211> 75
<212> PRT
<213> Homo sapiens

<400> 853
Met Gly Pro Leu Trp Gly Ala Pro Leu Arg Ala Trp Ala Ala Gly Ser
1   5   10   15

Val Gly Cys Pro Cys Cys Leu Ser Cys Ala Ser Pro Ser Ser Ile Ser
            20   25   30

Ser Ala Gly Asp Pro Leu Ala Ser Cys Ser Thr Cys Gly Ser Thr Trp
        35   40   45

Glu Ile Pro Leu Thr Trp Met Thr Met Asp His Leu Leu Val Arg Tyr
    50   55   60

Tyr Leu Ser Gln Ala Arg Trp Cys Thr Thr Gly
65   70   75

<210> 854
<211> 57
<212> PRT
<213> Homo sapiens

<400> 854
Ile Ser Tyr His His Val Lys Ala Ser His Leu Lys Ile Lys Ile Gln
                        460

```
      1 .              5                    10                   15
    Ile Ser Leu Lys Pro Glu Val Leu Val Pro Leu His Cys Leu Pro Leu
                 20                    25                   30

    Ser Pro Thr Pro Arg Glu Glu Ser Gly Gly Phe Leu Phe Ser Ile Ala
                 35                    40                   45

    Ile Ala Ala Val Gly Phe Leu Val Gln
             50                    55
```

```
<210> 855
<211> 10
<212> PRT
<213> Homo sapiens

<400> 855
Trp Ala Ser Met Ser Ser Val Phe Gly Leu
   1               5                   10
```

```
<210> 856
<211> 5
<212> PRT
<213> Homo sapiens

<400> 856
Ser Phe Ala Thr Cys
   1               5
```

```
<210> 857
<211> 73
<212> PRT
<213> Homo sapiens

<400> 857
Met Trp Leu Pro Ala Trp Ala Ala Ile Glu Thr Phe Ser Thr Cys Ser
   1               5                    10                   15

Ser Leu Ser Leu Ser Phe Gln Pro Arg Trp Ala Leu Ala Ser Glu Gly
                 20                    25                   30

Cys Ala Gly Ser Tyr Val Thr Thr His Arg Ala Leu Gly Ala His Leu
             35                    40                   45

Trp Pro Leu Trp Ser Asp Gln Phe Leu Gly Lys Gly Leu Gly Leu Arg
         50                    55                   60

Ile Pro Phe Ile Thr His Ala His Gln
  65                    70
```

```
<210> 858
<211> 36 ·
```

```
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (17)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 858
Met Ala Gly Glu Glu Met Ala Trp Gly Ala Arg Leu Trp Ile Met Cys
1               5                   10                  15

Xaa Leu Leu Phe Leu Ala Ala Ser Glu Gly Ile Met Pro Arg Leu Arg
                20                  25                  30

Ala Ser Ala Trp
            35


<210> 859
<211> 352
<212> PRT
<213> Homo sapiens

<400> 859
Val Ser Leu Leu Leu Trp Gly Ile Ser Ile Arg Gly Ala Asp Ala Cys
1               5                   10                  15

Ala Asp Ala His Leu Phe Cys Lys Glu Cys Leu Ile Arg Tyr Ala Gln
                20                  25                  30

Glu Ala Val Phe Gly Ser Gly Lys Leu Glu Leu Ser Cys Met Glu Gly
            35                  40                  45

Ser Cys Thr Cys Ser Phe Pro Thr Ser Glu Leu Glu Lys Val Leu Pro
    50                  55                  60

Gln Thr Ile Leu Tyr Lys Tyr Tyr Glu Arg Lys Ala Glu Glu Glu Val
65                  70                  75                  80

Ala Ala Ala Tyr Ala Asp Glu Leu Val Arg Cys Pro Ser Cys Ser Phe
                85                  90                  95

Pro Ala Leu Leu Asp Ser Asp Val Lys Arg Phe Ser Cys Pro Asn Pro
                100                 105                 110

His Cys Arg Lys Glu Thr Cys Arg Lys Cys Gln Gly Leu Trp Lys Glu
            115                 120                 125

His Asn Gly Leu Thr Cys Glu Glu Leu Ala Glu Lys Asp Asp Ile Lys
        130                 135                 140

Tyr Arg Thr Ser Ile Glu Glu Lys Met Thr Ala Ala Arg Ile Arg Lys
145                 150                 155                 160

Cys His Lys Cys Gly Thr Gly Leu Ile Lys Ser Glu Gly Cys Asn Arg
                165                 170                 175

Met Ser Cys Arg Cys Gly Ala Gln Met Cys Tyr Leu Cys Arg Val Ser
```

```
                180                 185                  190
```

Ile Asn Gly Tyr Asp His Phe Cys Gln His Pro Arg Ser Pro Gly Ala
        195   200   205

Pro Cys Gln Glu Cys Ser Arg Cys Ser Leu Trp Thr Asp Pro Thr Glu
    210   215   220

Asp Asp Glu Lys Leu Ile Glu Glu Ile Gln Lys Glu Ala Glu Glu Glu
225   230   235   240

Gln Lys Arg Lys Asn Gly Glu Asn Thr Phe Lys Arg Ile Gly Pro Pro
            245   250   255

Leu Glu Lys Pro Val Glu Lys Val Gln Arg Val Glu Ala Leu Pro Arg
            260   265   270

Pro Val Pro Gln Asn Leu Pro Gln Pro Gln Met Pro Pro Tyr Ala Phe
        275   280   285

Ala His Pro Pro Phe Pro Leu Pro Pro Val Arg Pro Val Phe Asn Asn
    290   295   300

Phe Pro Leu Asn Met Gly Pro Ile Pro Ala Pro Tyr Val Pro Pro Leu
305   310   315   320

Pro Asn Val Arg Val Asn Tyr Asp Phe Gly Pro Ile His Met Pro Leu
            325   330   335

Glu His Asn Leu Pro Met His Phe Gly Pro Gln Pro Arg His Arg Phe
            340   345   350

<210> 860
<211> 63
<212> PRT
<213> Homo sapiens

<400> 860
Met Ile Thr Phe Leu Pro Ile Ile Phe Ser Ile Leu Val Val Val Thr
1   5   10   15

Phe Val Ile Gly Asn Phe Ala Asn Gly Phe Ile Ala Leu Val Asn Ser
            20   25   30

Thr Glu Trp Val Lys Arg Gln Lys Ile Ser Phe Ala Asp Gln Ile Val
        35   40   45

Thr Ala Leu Ala Val Ser Arg Val Gly Leu Leu Trp Val Leu Leu
    50   55   60

<210> 861
<211> 8
<212> PRT

                              463

<213> Homo sapiens

<400> 861
Leu Thr Met Leu Phe Asn Val Ile
 1   5

<210> 862
<211> 7
<212> PRT
<213> Homo sapiens

<400> 862
Thr Tyr Ile His Phe Leu Asp
 1   5

<210> 863
<211> 53
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (35)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 863
Thr Glu Glu Phe Lys Tyr Ala Val Ser Cys Asn Cys Gly Thr Ala Ala
 1   5   10   15

Trp Val Arg Val Arg Glu Arg Glu Arg Lys Arg Glu Lys Lys Lys Lys
            20   25   30

Lys Arg Xaa Ala Ala Leu Glu Asp Pro Ser Arg Gly Pro Ser Leu Arg
        35   40   45

Val His Ala Thr Ser
        50

<210> 864
<211> 22
<212> PRT
<213> Homo sapiens

<400> 864
Leu Val Leu Phe Ile Thr Leu Leu Pro Gly Lys Leu Ala His Ser Trp
 1   5   10   15

His Thr Val Asn Val Gln
                20

<210> 865
<211> 2

464

<212> PRT
<213> Homo sapiens

<400> 865
Gly Cys
 1

<210> 866
<211> 40
<212> PRT
<213> Homo sapiens

<400> 866
Met Ile Leu Tyr Ile Cys Leu Leu Leu Lys Ile Trp Gly Cys Ser Leu
 1   5   10   15

Pro Cys Asn Phe Ser Phe Pro Leu Asp Leu Arg Lys Val Met Asp Phe
          20   25   30

Gln Phe Val Gln His Phe Phe Leu
        35   40

<210> 867
<211> 7
<212> PRT
<213> Homo sapiens

<400> 867
Ser Phe Cys Met Gly Thr Met
 1   5

<210> 868
<211> 86
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (2)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (25)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 868
Ser Xaa Ile Val Gly Leu Ala Ile Trp Arg Gly Gly Leu Cys Gln Glu
 1   5   10   15

Leu Pro Leu Glu Arg Phe Leu Leu Xaa Thr Val Phe Gly Ser Asp Leu
          20   25   30

Ser Leu Leu Ser Gly Gly Asp Leu Cys Leu Glu Leu Leu Gly Gly Leu

```
          35                    40                      45
```

Cys Leu Glu Val Cys Leu Arg Gly Asp Ile Cys Leu Gly Pro Leu Arg
     50   55   60

Val Ser Val Ser Glu Leu Ser Leu Leu Cys Leu Ser Val Gln Gly Gln
 65   70   75   80

Gln Lys Val Cys Pro Phe
              85

<210> 869
<211> 33
<212> PRT
<213> Homo sapiens

<400> 869
Lys Ile Leu Val Ser Tyr Leu Met Pro Gly Met Met Arg Ile Glu Asn
 1   5   10   15

Phe Ser Ile Phe Met Cys Leu Thr Gly Cys Leu Gly Ile Asn Phe Ala
            20   25   30

Phe

<210> 870
<211> 288
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (87)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (99)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (230)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (263)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (264)
<223> Xaa equals any of the naturally occurring L-amino acids.

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<220>
<221> SITE
<222> (270)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (275)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 870
Met Ala Arg Ile Ser Phe Ser Tyr Leu Cys Pro Ala Ser Trp Tyr Phe
 1               5                  10                  15

Thr Val Pro Thr Val Ser Pro Phe Leu Arg Gln Arg Val Ala Phe Leu
            20                  25                  30

Gly Leu Phe Phe Ile Ser Cys Leu Leu Leu Leu Met Leu Ile Ile Asp
        35                  40                  45

Phe Arg His Trp Ser Ala Ser Leu Pro Arg Asp Arg Gln Tyr Glu Arg
    50                  55                  60

Tyr Leu Ala Arg Val Gly Glu Leu Glu Ala Thr Asp Thr Glu Asp Pro
65                  70                  75                  80

Asn Leu Asn Tyr Gly Leu Xaa Val Asp Cys Gly Ser Ser Gly Ser Arg
                85                  90                  95

Ile Phe Xaa Tyr Phe Trp Pro Arg His Asn Gly Asn Pro His Asp Leu
            100                 105                 110

Leu Asp Ile Lys Gln Met Arg Asp Arg Asn Ser Gln Pro Val Val Lys
        115                 120                 125

Lys Ile Lys Pro Gly Ile Ser Ala Met Ala Asp Thr Pro Glu His Ala
    130                 135                 140

Ser Asp Tyr Leu Arg Pro Leu Leu Ser Phe Ala Ala Ala His Val Pro
145                 150                 155                 160

Val Lys Lys His Lys Glu Thr Pro Leu Tyr Ile Leu Cys Thr Ala Gly
                165                 170                 175

Met Arg Leu Leu Pro Glu Arg Lys Gln Leu Ala Ile Leu Ala Asp Leu
            180                 185                 190

Val Lys Asp Leu Pro Leu Glu Phe Asp Phe Leu Phe Ser Gln Ser Gln
        195                 200                 205

Ala Glu Val Ile Ser Gly Lys Gln Glu Gly Val Tyr Ala Trp Ile Gly
    210                 215                 220

Ile Asn Phe Val Leu Xaa Arg Phe Asp His Glu Asp Glu Ser Asp Ala
225                 230                 235                 240

Glu Ala Thr Gln Glu Leu Ala Ala Gly Arg Arg Arg Thr Val Gly Ile
                245                 250                 255

Leu Asp Met Gly Gly Ala Xaa Xaa Gln Ile Ala Tyr Glu Xaa Pro Thr
```

                    260   265   270

    Phe Pro Xaa Lys Lys Thr Pro Pro Leu Phe Pro Leu Leu Gly Gly Ile
            275   280   285

<210> 871
<211> 107
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (66)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 871
Pro Leu Gly Arg Glu Pro Leu Ala Gly Phe Leu Ser Phe Leu Ser Phe
  1   5   10   15

Ser Leu Leu Trp Cys Leu Glu Ala Phe Pro Arg Leu Gln Phe Leu Thr
            20   25   30

Thr Leu Thr Asp Phe Ala Ile Val Leu Ser Pro Pro Leu Ser Phe Pro
        35   40   45

Lys Leu Thr Leu Trp Arg Leu Ile Lys Arg Lys Asn His Arg Pro Gly
    50   55   60

Ala Xaa Leu Thr Pro Arg Arg Arg Ala Asn His Leu Arg Cys Gly Val
 65   70   75   80

Arg Asp Gln Pro Asp Gln Asn Arg Glu Thr Pro Ser Leu Leu Asn Asn
                85   90   95

Thr Lys Leu Ala Gly Arg Gly Gly Ala Arg Leu
            100   105

<210> 872
<211> 64
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (7)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (27)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 872

```
Ser Trp Val Ile Val Val Xaa Ile Trp Gly Tyr Leu Leu Glu Gly His
 1               5               10                  15

Gly Val Pro Phe Cys Lys Ser Tyr Gly Pro Xaa Pro Trp Lys Leu His
            20              25              30

Thr His His Ala Ala Tyr Asn Ser Gly Ser Ser Gln Val Tyr Arg Ile
        35              40                  45

Leu Gly Asn Ser Pro Cys Pro Val Leu Ile His Cys Ser Phe Ser Gly
    50              55                  60
```

```
<210> 873
<211> 14
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (9)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (14)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 873
Trp Lys Gly Leu Leu Glu Gly Ser Xaa Glu Ala Thr Met Xaa
 1               5               10
```

```
<210> 874
<211> 66
<212> PRT
<213> Homo sapiens

<400> 874
Met Ser Trp Val Ile Val Val Ile Ile Trp Gly Tyr Leu Leu Glu Gly
 1               5               10                  15

His Gly Val Pro Phe Cys Lys Ser Tyr Gly Pro Ser Pro Trp Lys Leu
            20              25              30

His Thr His His Ala Ala Tyr Asn Ser Gly Ser Ser Gln Val Tyr Arg
        35              40                  45

Ile Leu Glu Thr Leu Met Ser Gly Ser Thr His Cys Ser Phe Ser Gly
    50              55                  60

Thr Phe
 65
```

<210> 875
<211> 90
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (31)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (57)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 875
Met Pro Arg Ala Pro Trp Arg Ile Pro Leu Cys Ala Leu Pro Thr Leu
 1   5   10   15

Cys Leu Gly Ser Pro Leu Pro Ser Gln Pro Thr His Pro Ile Xaa Tyr
                20   25   30

Asp His Arg Ala Pro Thr Trp Lys Met Ala His Pro Gly Gly Pro Arg
            35   40   45

Ser Ser His Ser Pro Arg Thr Trp Xaa Thr Pro Ser Ser Gln Thr Lys
        50   55   60

Ala Ala Leu Pro Ala Gly Gly Ala Arg Asn Ser Pro Leu Gln Leu Cys
65   70   75   80

Thr Arg Ser Arg Phe Cys Gly Thr Pro Met
                85   90

<210> 876
<211> 127
<212> PRT
<213> Homo sapiens

<400> 876
Met Pro Arg Ala Pro Trp Arg Ile Pro Leu Cys Ala Leu Pro Thr Leu
 1   5   10   15

Cys Leu Gly Ser Pro Leu Pro Ser Gln Pro Thr His Pro Ile Phe Tyr
                20   25   30

Asp His Arg Ala Pro Thr Trp Lys Met Ala His Pro Gly Gly Pro Arg
            35   40   45

Ser Ser His Ser Pro Arg Gly Pro Gly Gly His Pro Ala Leu Arg Gln
        50   55   60

Arg Leu Pro Cys Arg Arg Gly Glu Pro Glu Thr Ala Leu Cys Ser Ser
 65   70   75   80

Ala Pro Gly Ala Gly Phe Ala Glu Pro Pro Cys Lys Ala Ser Pro Gly
                85   90   95

```
Trp Gly Pro Pro Ser Arg Gly Pro Gln Gly Asp Arg Ser Gln Gly Glu
            100             105             110

Trp Leu Pro Ala Leu Gly Thr Pro Cys Gly Gly Pro Asp Asp Ser
            115             120             125
```

```
<210> 877
<211> 66
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (43)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 877
Met Ala Gly Gln Phe Arg Ser Tyr Val Trp Asp Pro Leu Leu Ile Leu
 1               5              10              15

Ser Gln Ile Val Leu Met Gln Thr Val Tyr Tyr Gly Ser Leu Gly Leu
            20              25              30

Trp Leu Ala Leu Val Asp Gly Leu Val Arg Xaa Ala Pro Arg Trp Thr
            35              40              45

Arg Cys Ser Thr Pro Arg Ser Trp Ala Phe Pro Pro Leu Gln Ala Gly
     50              55              60

Ser Pro
 65
```

```
<210> 878
<211> 124
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (28)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 878
Thr Gln Ile Pro Thr His Ile Ser Arg Tyr Thr Pro Leu His Ser Ser
 1               5              10              15

Leu Gly Asn Arg Ala Arg Leu Arg Leu Lys Lys Xaa Lys Ile Lys Tyr
            20              25              30

Ala Tyr Leu Cys Pro Pro Ser Leu Lys Gln Leu Leu Asn Tyr Ala Val
            35              40              45

Ile Asn Gly Leu Ser Ser Ala Asn Tyr Phe Cys Leu Tyr Thr Lys Val
     50              55              60
```

```
Pro Gln Ala Met Leu Leu Leu Ala Ser Gly Leu Ser Ser Ala Phe Pro
 65              70               75              80

Tyr Asp Ser Leu Gly Phe Thr Leu Ser Met Leu Leu Phe Phe Glu Arg
             85               90              95

Asn Lys Ser Arg Val Glu Val Leu Ala Lys Glu Pro Ser Ala Pro Ser
            100              105              110

Ser Tyr Trp Asp Ser Glu Asn Arg Gly Cys Gln Leu
        115              120
```

<210> 879
<211> 39
<212> PRT
<213> Homo sapiens

<400> 879
```
Met Ala Gly Gln Phe Arg Ser Tyr Val Trp Asp Pro Leu Leu Ile Leu
 1           5              10              15

Ser Gln Ser Ser Ser Cys Arg Pro Cys Ile Thr Ala Arg Trp Ala Cys
            20              25              30

Gly Trp Arg Trp Trp Thr Gly
        35
```

<210> 880
<211> 67
<212> PRT
<213> Homo sapiens

<400> 880
```
Met Ser Leu Cys Arg Ile Leu Gly Tyr Ser Phe Ser Ser Arg Leu Ser
 1           5              10              15

Ser Leu Ile Leu Pro Leu Ala Val Phe His Tyr Cys Leu Ser Cys Pro
            20              25              30

Leu His Phe Lys Leu Ser Phe Lys Tyr Leu Pro Phe Pro Ser Phe Pro
        35              40              45

Phe Ser Ser Leu Pro Cys Pro Ala Leu Pro Cys Pro Ala Leu Pro Ser
    50              55              60

Pro Pro Leu
 65
```

<210> 881
<211> 86
<212> PRT
<213> Homo sapiens

<400> 881

472

```
Met Ser Leu Cys Arg Ile Leu Gly Tyr Ser Phe Ser Ser Arg Leu Ser
  1               5              10                     15

Ser Leu Ile Leu Pro Leu Ala Val Phe His Tyr Cys Leu Ser Cys Pro
            20              25                     30

Leu His Phe Lys Leu Ser Phe Lys Tyr Leu Pro Phe Pro Ser Phe Pro
        35                  40                 45

Phe Ser Ser Leu Pro Cys Pro Ala Leu Pro Cys Pro Ala Leu Pro Ser
        50              55              60

Pro Pro Leu Pro Cys Pro Pro Leu Pro Ser Pro Pro Leu Pro Leu Pro
  65              70                  75                 80

Ser Leu Ser Phe Phe Arg
                85
```

```
<210> 882
<211> 55
<212> PRT
<213> Homo sapiens

<400> 882
Met Cys Val Gly Leu Phe Leu Ser Ser Val Phe Phe His Ile Cys Val
  1               5              10                     15

His Pro Phe Ala Asn Ala Thr Leu Ser Cys Leu Leu Glu Ile Gly Lys
            20              25                     30

Leu Cys Glu Ser Phe Asn Phe Val Leu Phe Gln Ile Val Leu Ala Ile
        35                  40                 45

Leu Val Pro Leu Thr Phe Ile
        50                  55
```

```
<210> 883
<211> 73
<212> PRT
<213> Homo sapiens

<400> 883
Thr Leu Phe Val Ser Tyr Gln Leu Ser Asn Pro Gln Tyr Ser Ser Phe
  1               5              10                     15

Ile Ser Gln Asn Arg Lys Leu Lys Gln Arg Glu Glu Lys Leu His Glu
            20              25                     30

Arg Phe Tyr Thr Ala Val Arg Ser Leu Asn Trp Ile Leu Asn Leu Ala
        35                  40                 45

Phe Trp Leu Glu Ser Pro Ser Phe Tyr Gln Leu Cys Ile Ala Val Arg
        50              55              60

Val Asp Ser Pro Trp Lys Gly Lys Ser
  65              70
```

<210> 884
<211> 48
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (15)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (29)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 884
Met Lys Pro Pro Pro Leu Phe Phe Phe Leu Lys Ile Val Leu Xaa Ile
 1   5   10   15

Trp Gly Pro Leu Trp Phe His Met Asn Phe Arg Phe Xaa Phe Ser Ile
            20   25   30

Ser Met Lys Asn Ala Ile Gly Ile Leu Ile Gly Ile Ala Leu Asn Leu
        35   40   45

<210> 885
<211> 48
<212> PRT
<213> Homo sapiens

<400> 885
Met Lys Pro Pro Pro Leu Phe Phe Phe Leu Lys Ile Val Leu Ala Ile
 1   5   10   15

Trp Gly Pro Leu Trp Phe His Met Asn Phe Arg Phe Val Phe Ser Ile
            20   25   30

Ser Met Lys Asn Ala Ile Gly Ile Leu Ile Gly Ile Ala Leu Asn Leu
        35   40   45

<210> 886
<211> 214
<212> PRT
<213> Homo sapiens

<220>
<221> SITE

<222> (199)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (206)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (214)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 886
Met Leu Gly Ala Arg Ala Trp Leu Gly Arg Val Leu Leu Leu Pro Arg
 1   5   10   15

Ala Gly Ala Gly Leu Ala Ala Ser Arg Arg Cys Pro Gly Val Trp Pro
            20   25   30

Arg Thr Trp Pro His Arg Ser Pro Ser Arg Gly Ser Ser Ser Arg Asp
        35   40   45

Lys Asp Arg Ser Ala Thr Val Ser Ser Ser Val Pro Met Pro Ala Gly
    50   55   60

Gly Lys Gly Ser His Pro Ser Ser Thr Pro Gln Arg Val Pro Asn Arg
65   70   75   80

Leu Ile His Glu Lys Ser Pro Tyr Leu Leu Gln His Ala Tyr Asn Pro
                85   90   95

Val Asp Trp Tyr Pro Trp Gly Gln Glu Ala Phe Asp Lys Ala Arg Lys
            100   105   110

Glu Asn Lys Pro Ile Phe Leu Ser Val Gly Tyr Ser Thr Cys His Trp
        115   120   125

Cys His Met Met Glu Glu Glu Ser Phe Gln Asn Glu Glu Ile Gly Arg
    130   135   140

Leu Leu Ser Glu Asp Phe Val Ser Val Lys Val Asp Arg Glu Glu Arg
145   150   155   160

Pro Asp Val Asp Lys Val Tyr Met Thr Phe Val Gln Ala Thr Ser Ser
            165   170   175

Gly Gly Gly Trp Pro Met Asn Val Trp Leu Thr Pro Asn Leu Gln Pro
            180   185   190

Phe Val Gly Gly Thr Ile Xaa Leu Leu Lys Asp Gly Leu Xaa Arg Val
        195   200   205

Gly Ser Ala Gln Cys Xaa
    210

<210> 887
<211> 43

475

```
<212> PRT
<213> Homo sapiens

<400> 887
Met Leu Gly Ala Arg Ala Trp Leu Gly Arg Val Leu Leu Leu Pro Arg
1               5                   10                  15

Ala Gly Ala Gly Leu Ala Ala Ser Arg Arg Ser Ala Cys Ser Pro Thr
                20                  25                  30

Ser Arg Leu Asn Ser Leu Arg Ser Leu Ile Pro
            35                  40



<210> 888
<211> 802
<212> PRT
<213> Homo sapiens

<400> 888
Met Leu Gly Ala Arg Ala Trp Leu Gly Arg Val Leu Leu Leu Pro Arg
1               5                   10                  15

Ala Gly Ala Gly Leu Ala Ala Ser Arg Arg Cys Pro Gly Val Trp Pro
                20                  25                  30

Arg Thr Trp Pro His Arg Ser Pro Ser Arg Gly Ser Ser Ser Arg Asp
            35                  40                  45

Lys Asp Arg Ser Ala Thr Val Ser Ser Ser Val Pro Met Pro Ala Gly
        50                  55                  60

Gly Lys Gly Ser His Pro Ser Ser Thr Pro Gln Arg Val Pro Asn Arg
65                  70                  75                  80

Leu Ile His Glu Lys Ser Pro Tyr Leu Leu Gln His Ala Tyr Asn Pro
                85                  90                  95

Val Asp Trp Tyr Pro Trp Gly Gln Glu Ala Phe Asp Lys Ala Arg Lys
            100                 105                 110

Glu Asn Lys Pro Ile Phe Leu Ser Val Gly Tyr Ser Thr Cys His Trp
        115                 120                 125

Cys His Met Met Glu Glu Glu Ser Phe Gln Asn Glu Glu Ile Gly Arg
    130                 135                 140

Leu Leu Ser Glu Asp Phe Val Ser Val Lys Val Asp Arg Glu Glu Arg
145                 150                 155                 160

Pro Asp Val Asp Lys Val Tyr Met Thr Phe Val Gln Ala Thr Ser Ser
                165                 170                 175

Gly Gly Gly Trp Pro Met Asn Val Trp Leu Thr Pro Asn Leu Gln Pro
            180                 185                 190

Phe Val Gly Gly Thr Tyr Phe Pro Pro Glu Asp Gly Leu Thr Arg Val
        195                 200                 205
```

```
Gly Phe Arg Thr Val Leu Leu Arg Ile Arg Glu Gln Trp Lys Gln Asn
    210              215                 220

Lys Asn Thr Leu Leu Glu Asn Ser Gln Arg Val Thr Thr Ala Leu Leu
225              230                 235                     240

Ala Arg Ser Glu Ile Ser Val Gly Asp Arg Gln Leu Pro Pro Ser Ala
                245              250                     255

Ala Thr Val Asn Asn Arg Cys Phe Gln Gln Leu Asp Glu Gly Tyr Asp
            260              265              270

Glu Glu Tyr Gly Gly Phe Ala Glu Ala Pro Lys Phe Pro Thr Pro Val
        275              280              285

Ile Leu Ser Phe Leu Phe Ser Tyr Trp Leu Ser His Arg Leu Thr Gln
    290              295              300

Asp Gly Ser Arg Ala Gln Gln Met Ala Leu His Thr Leu Lys Met Met
305              310              315                     320

Ala Asn Gly Gly Ile Arg Asp His Val Gly Gln Gly Phe His Arg Tyr
                325              330              335

Ser Thr Asp Arg Gln Trp His Val Pro His Phe Glu Lys Met Leu Tyr
            340              345              350

Asp Gln Ala Gln Leu Ala Val Ala Tyr Ser Gln Ala Phe Gln Leu Ser
    355              360              365

Gly Asp Glu Phe Tyr Ser Asp Val Ala Lys Gly Ile Leu Gln Tyr Val
    370              375              380

Ala Arg Ser Leu Ser His Arg Ser Gly Gly Phe Tyr Ser Ala Glu Asp
385              390              395                     400

Ala Asp Ser Pro Pro Glu Arg Gly Gln Arg Pro Lys Glu Gly Ala Tyr
            405              410              415

Tyr Val Trp Thr Val Lys Glu Val Gln Gln Leu Leu Pro Glu Pro Val
            420              425              430

Leu Gly Ala Thr Glu Pro Leu Thr Ser Gly Gln Leu Leu Met Lys His
        435              440              445

Tyr Gly Leu Thr Glu Ala Gly Asn Ile Ser Pro Ser Gln Asp Pro Lys
    450              455              460

Gly Glu Leu Gln Gly Gln Asn Val Leu Thr Val Arg Tyr Ser Leu Glu
465              470              475                     480

Leu Thr Ala Ala Arg Phe Gly Leu Asp Val Glu Ala Val Arg Thr Leu
            485              490              495

Leu Asn Ser Gly Leu Glu Lys Leu Phe Gln Ala Arg Lys His Arg Pro
            500              505              510

Lys Pro His Leu Asp Ser Lys Met Leu Ala Ala Trp Asn Gly Leu Met
    515              520              525
```

477

```
Val Ser Gly Tyr Ala Val Thr Gly Ala Val Leu Gly Gln Asp Arg Leu
    530             535             540

Ile Asn Tyr Ala Thr Asn Gly Ala Lys Phe Leu Lys Arg His Met Phe
545             550             555             560

Asp Val Ala Ser Gly Arg Leu Met Arg Thr Cys Tyr Thr Gly Pro Gly
                565             570                 575

Gly Thr Val Glu His Ser Asn Pro Pro Cys Trp Gly Phe Leu Glu Asp
            580             585             590

Tyr Ala Phe Val Val Arg Gly Leu Leu Asp Leu Tyr Glu Ala Ser Gln
        595             600             605

Glu Ser Ala Trp Leu Glu Trp Ala Leu Arg Leu Gln Asp Thr Gln Asp
    610             615             620

Arg Leu Phe Trp Asp Ser Gln Gly Gly Gly Tyr Phe Cys Ser Glu Ala
625             630             635             640

Glu Leu Gly Ala Gly Leu Pro Leu Arg Leu Lys Asp Asp Gln Asp Gly
            645         650             655

Ala Glu Pro Ser Ala Asn Ser Val Ser Ala His Asn Leu Leu Arg Leu
            660             665             670

His Gly Phe Thr Gly His Lys Asp Trp Met Asp Lys Cys Val Cys Leu
        675             680             685

Leu Thr Ala Phe Ser Glu Arg Met Arg Arg Val Pro Val Ala Leu Pro
    690             695             700

Glu Met Val Arg Ala Leu Ser Ala Gln Gln Gln Thr Leu Lys Gln Ile
705             710             715             720

Val Ile Cys Gly Asp Arg Gln Ala Lys Asp Thr Lys Ala Leu Val Gln
            725             730             735

Cys Val His Ser Val Tyr Ile Pro Asn Lys Val Leu Ile Leu Ala Asp
            740             745             750

Gly Asp Pro Ser Ser Phe Leu Ser Arg Gln Leu Pro Phe Leu Ser Thr
        755             760             765

Leu Arg Arg Leu Glu Asp Gln Ala Thr Ala Tyr Val Cys Glu Asn Gln
    770             775             780

Ala Cys Ser Val Pro Ile Thr Asp Pro Cys Glu Leu Arg Lys Leu Leu
785             790             795             800

His Pro
```

```
<210> 889
<211> 98
<212> PRT
<213> Homo sapiens
```

<400> 889
Met His Cys Cys Gln Leu Pro Trp Arg Cys Ala Gln Ala Pro Gln Glu
1   5   10   15

Ala Phe Leu Leu Cys Leu Leu Phe Leu Ile Leu Val Leu Val Leu Leu
            20   25   30

Gly Cys Ser Arg Gly Leu Pro Gly His Thr Pro Trp Arg Leu His Pro
            35   40   45

Ala Ala Ala Ala Leu Leu Ala Pro Leu Leu His Asp Ala Leu Gly Ala
        50   55   60

Cys Gly Phe Gln Gly Pro Glu Tyr Leu Leu Pro Cys Leu Leu Pro Leu
65   70   75   80

Pro Lys Pro Gly Gln Leu Gln Gly Pro Trp Gly Pro Leu Trp Ala Leu
            85   90   95

Leu Pro

<210> 890
<211> 25
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (9)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 890
Cys Ala Val Arg Phe Arg Glu Gln Xaa Ala Pro Glu Arg Val Phe Leu
1   5   10   15

Pro Thr Arg Gly Arg Lys Ser Glu Pro
            20   25

<210> 891
<211> 22
<212> PRT
<213> Homo sapiens

<400> 891
Leu Pro Arg Pro Cys Ala Pro Ser Pro Val Trp Arg Gln Val Gly Arg
1   5   10   15

Glu Glu Ala Ser Leu Leu
            20

<210> 892
<211> 98

<212> PRT
<213> Homo sapiens

<400> 892
Met His Cys Cys Gln Leu Pro Trp Arg Cys Ala Gln Ala Pro Gln Glu
 1   5   10   15

Ala Phe Leu Leu Cys Leu Leu Phe Leu Ile Leu Val Leu Val Leu Leu
               20   25   30

Gly Cys Ser Arg Gly Leu Pro Gly His Thr Pro Trp Arg Leu His Pro
           35   40   45

Ala Ala Ala Ala Leu Leu Ala Pro Leu Leu His Asp Ala Leu Gly Ala
       50   55   60

Cys Gly Phe Gln Gly Pro Glu Tyr Leu Leu Pro Cys Leu Leu Pro Leu
65   70   75   80

Pro Lys Pro Gly Gln Leu Gln Gly Pro Trp Gly Pro Leu Trp Ala Leu
               85   90   95

Leu Pro

<210> 893
<211> 99
<212> PRT
<213> Homo sapiens

<400> 893
Ser Lys Ser Asn Pro Lys Pro Arg Cys Gln Lys Gly Thr Pro Trp Val
 1   5   10   15

Ile Arg Pro His Phe His Ser Asp Gly Val Ala Ser Ser Lys Thr Gly
               20   25   30

Leu Thr Val Phe Gln Met Ser Gly Leu Gln Ala Pro Ile Pro Ser Arg
           35   40   45

Cys Ser Ala Ala Ala Leu Ile Leu Arg Gly Gly Leu Pro Cys Thr Pro
       50   55   60

Leu Glu Ala Phe His Trp Gly Asn Cys Leu Pro Gly Ser Ala Leu Arg
65   70   75   80

Ile Arg Ile Ala Lys Ala Gly Gln Ser Leu Pro Gln Gly Cys Ser Thr
               85   90   95

Gly Gln Ala

<210> 894
<211> 89
<212> PRT
<213> Homo sapiens

<400> 894
Met Lys Pro Ala Thr Ala Ser Ala Leu Leu Leu Leu Leu Leu Gly Leu
 1   5   10   15

Ala Trp Thr Gln Gly Ser His Gly Trp Gly Ala Asp Ala Ser Ser Leu
            20   25   30

Gln Lys Arg Ala Gly Arg Ala Asp Gln Val Ser Leu Cys Pro Gln Val
        35   40   45

Thr Leu Gln Gly Pro Trp Ser Pro Leu Ala Leu Leu Pro Gly Leu Gly
    50   55   60

Asn Leu Lys Phe Ser Phe Thr Pro Pro Phe Asn Gly Phe Leu Ser Arg
65   70   75   80

Val Gln Asp Gly Arg Arg Trp Gln Leu
                85

<210> 895
<211> 73
<212> PRT
<213> Homo sapiens

<400> 895
Met Ala Gly Asn Ile Gln Ala Val Glu Thr Gly Tyr Val Leu Ile Cys
 1   5   10   15

Leu Ile Val Pro Leu Leu Leu Cys Gly Leu Arg Glu Gly Gln Glu Val
            20   25   30

Pro Phe Asp Val Asn Lys Ala Lys Tyr Leu Pro Thr Phe Leu Lys Lys
        35   40   45

Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys
    50   55   60

Lys Lys Lys Lys Lys Lys Lys Lys Ile
65   70

<210> 896
<211> 72
<212> PRT
<213> Homo sapiens

<400> 896
Met Ala Gly Asn Ile Gln Ala Val Glu Thr Gly Tyr Val Leu Ile Cys
 1   5   10   15

Leu Ile Val Pro Leu Leu Leu Cys Gly Leu Arg Glu Gly Gln Glu Val
            20   25   30

Pro Phe Asp Val Asn Lys Ala Lys Tyr Leu Pro Thr Phe Leu Lys Lys
        35   40   45

```
       Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys
            50                  55                  60

       Lys Lys Lys Lys Lys Lys Lys Lys
        65                  70
```

```
<210> 897
<211> 29
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (26)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (29)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 897
Met Tyr Val Trp Val Ser Gly Ala Leu Val Leu Val Leu Ser Pro His
 1               5                  10                  15

Pro Ala Ser Arg Thr Leu Cys Leu Met Xaa Gln Ala Xaa
            20                  25
```

```
<210> 898
<211> 80
<212> PRT
<213> Homo sapiens

<400> 898
Pro His Cys Ala Ser Arg Ala Val Pro Tyr Pro Pro Gly Pro Ala Ala
 1               5                  10                  15

Ala Ala Phe Pro Arg Gln Gly Leu Gln Leu Ala Thr Thr Cys Gly His
            20                  25                  30

Ser Ser Asp Pro Ala Cys Phe Gly Gln Cys Pro Cys His Leu Cys Ala
            35                  40                  45

Asn His Pro Gly Tyr Leu Trp Ser Tyr Arg Val His Leu Ser Pro Gln
        50                  55                  60

Pro His Leu His Pro Pro Gln His Leu Leu Pro Pro His Cys Thr Leu
 65                  70                  75                  80
```

```
<210> 899
<211> 29
```

<210> PRT
<213> Homo sapiens

<400> 899
Met Tyr Val Trp Val Ser Gly Ala Leu Val Leu Val Leu Ser Pro His
1   5   10   15

Pro Ala Ser Arg Thr Leu Cys Leu Met Ala Gln Ala Val
            20   25

<210> 900
<211> 53
<212> PRT
<213> Homo sapiens

<400> 900
Met Arg Ile Pro Val Phe Pro Lys Gln Leu Met Phe Thr Gly Leu Val
1   5   10   15

Phe Leu Leu Leu Leu Ser Lys Asp Glu Gly Ile His Asn Arg Leu Ser
            20   25   30

Leu Glu Asn Thr Asn Asp Gly Gln Leu Phe Gly Val Ile Asn Glu Leu
        35   40   45

Ala Thr Thr Leu Met
        50

<210> 901
<211> 46
<212> PRT
<213> Homo sapiens

<400> 901
Met Arg Ile Pro Val Phe Pro Lys Gln Leu Met Phe Thr Gly Leu Val
1   5   10   15

Phe Leu Leu Leu Leu Ser Lys Asp Glu Gly Ile His Asn Arg Leu Ser
            20   25   30

Leu Glu Asn Thr Asn Asp Gly Gln Leu Phe Gly Val Ile Lys
        35   40   45

<210> 902
<211> 19
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (7)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>

483

<221> SITE
<222> (11)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 902
Met Pro Phe Thr Leu Gly Xaa Thr Arg Arg Xaa Arg Gly Leu Ala Lys
  1   5   10   15

Lys Pro Lys

<210> 903
<211> 531
<212> PRT
<213> Homo sapiens

<400> 903
Met Leu Cys Ala Leu Leu Leu Pro Ser Leu Leu Gly Ala Thr Arg
  1   5   10   15

Ala Ser Pro Thr Ser Gly Pro Gln Glu Cys Ala Lys Gly Ser Thr Val
           20   25   30

Trp Cys Gln Asp Leu Gln Thr Ala Ala Arg Cys Gly Ala Val Gly Tyr
       35   40   45

Cys Gln Gly Ala Val Trp Asn Lys Pro Thr Ala Lys Ser Leu Pro Cys
    50   55   60

Asp Val Cys Gln Asp Ile Ala Ala Ala Ala Gly Asn Gly Leu Asn Pro
 65   70   75   80

Asp Ala Thr Glu Ser Asp Ile Leu Ala Leu Val Met Lys Thr Cys Glu
               85   90   95

Trp Leu Pro Ser Gln Glu Ser Ser Ala Gly Cys Lys Trp Met Val Asp
              100   105   110

Ala His Ser Ser Ala Ile Leu Ser Met Leu Arg Gly Ala Pro Asp Ser
       115   120   125

Ala Pro Ala Gln Val Cys Thr Ala Leu Ser Leu Cys Glu Pro Leu Gln
    130   135   140

Arg His Leu Ala Thr Leu Arg Pro Leu Ser Lys Glu Asp Thr Phe Glu
145   150   155   160

Ala Val Ala Pro Phe Met Ala Asn Gly Pro Leu Thr Phe His Pro Arg
               165   170   175

Gln Ala Pro Glu Gly Ala Leu Cys Gln Asp Cys Val Arg Gln Val Ser
              180   185   190

Arg Leu Gln Glu Ala Val Arg Ser Asn Leu Thr Leu Ala Asp Leu Asn
         195   200   205

Ile Gln Glu Gln Cys Glu Ser Leu Gly Pro Gly Leu Ala Val Leu Cys
    210   215   220

                              484

```
Lys Asn Tyr Leu Phe Gln Phe Phe Val Pro Ala Asp Gln Ala Leu Arg
225             230             235             240

Leu Leu Pro Pro Gln Glu Leu Cys Arg Lys Gly Gly Phe Cys Glu Glu
        245             250             255

Leu Gly Ala Pro Ala Arg Leu Thr Gln Val Val Ala Met Asp Gly Val
        260             265             270

Pro Ser Leu Glu Leu Gly Leu Pro Arg Lys Gln Ser Glu Met Gln Met
        275             280             285

Lys Ala Gly Val Thr Cys Glu Val Cys Met Asn Val Val Gln Lys Leu
    290             295             300

Asp His Trp Leu Met Ser Asn Ser Ser Glu Leu Met Ile Thr His Ala
305             310             315             320

Leu Glu Arg Val Cys Ser Val Met Pro Ala Ser Ile Thr Lys Glu Cys
            325             330             335

Ile Ile Leu Val Asp Thr Tyr Ser Pro Ser Leu Val Gln Leu Val Ala
        340             345             350

Lys Ile Thr Pro Glu Lys Val Cys Lys Phe Ile Arg Leu Cys Gly Asn
        355             360             365

Arg Arg Arg Ala Arg Ala Val His Asp Ala Tyr Ala Ile Val Pro Ser
    370             375             380

Pro Glu Trp Asp Ala Glu Asn Gln Gly Ser Phe Cys Asn Gly Cys Lys
385             390             395             400

Arg Leu Leu Thr Val Ser Ser His Asn Leu Glu Ser Lys Ser Thr Lys
            405             410             415

Arg Asp Ile Leu Val Ala Phe Lys Gly Gly Cys Ser Ile Leu Pro Leu
        420             425             430

Pro Tyr Met Ile Gln Cys Lys His Phe Val Thr Gln Tyr Glu Pro Val
        435             440             445

Leu Ile Glu Ser Leu Lys Asp Met Met Asp Pro Val Ala Val Cys Lys
    450             455             460

Lys Val Gly Ala Cys His Gly Pro Arg Thr Pro Leu Leu Gly Thr Asp
465             470             475             480

Gln Cys Ala Leu Gly Pro Ser Phe Trp Cys Arg Ser Gln Glu Ala Ala
            485             490             495

Ser Cys Ala Thr Leu Cys Asn Thr Ala Arg Ser Met Tyr Gly Lys Arg
            500             505             510

Cys Thr Ser Thr Leu Gly Asn Thr Arg Asp Arg Gly Cys Gln Arg Pro
        515             520             525

Arg Ala Cys
    530
```

485

```
<210> 904
<211> 498
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (11)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (20)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (398)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 904
Glu Ala Leu Gly Gly Arg Cys Leu Trp Glu Xaa Pro Val Thr Phe Thr
 1               5                  10                  15

Val His Phe Xaa Asp Asn Ser Gly Asp Val Phe His Ala His Ser Ser
            20                  25                  30

Val Leu Asn Phe Ala Thr Asn Arg Asp Asp Phe Val Gln Ile Gly Lys
        35                  40                  45

Gly Pro Thr Asn Asn Thr Cys Val Val Arg Thr Val Ser Val Gly Leu
    50                  55                  60

Thr Leu Leu Arg Val Trp Asp Ala Glu His Pro Gly Leu Ser Asp Phe
65                  70                  75                  80

Met Pro Leu Pro Val Leu Gln Ala Ile Ser Pro Glu Leu Ser Gly Ala
            85                  90                  95

Met Val Val Gly Asp Val Leu Cys Leu Ala Thr Val Leu Thr Ser Leu
            100                 105                 110

Glu Gly Leu Ser Gly Thr Trp Ser Ser Ser Ala Asn Ser Ile Leu His
        115                 120                 125

Ile Asp Pro Lys Thr Gly Val Ala Val Ala Arg Ala Val Gly Ser Val
    130                 135                 140

Thr Val Tyr Tyr Glu Val Ala Gly His Leu Arg Thr Tyr Lys Glu Val
145                 150                 155                 160

Val Val Ser Val Pro Gln Arg Ile Met Ala Arg His Leu His Pro Ile
                165                 170                 175

Gln Thr Ser Phe Gln Glu Ala Thr Ala Ser Lys Val Ile Val Ala Val
            180                 185                 190
```

```
Gly Asp Arg Ser Ser Asn Leu Arg Gly Glu Cys Thr Pro Thr Gln Arg
        195                  200                205

Glu Val Ile Gln Ala Leu His Pro Glu Thr Leu Ile Ser Cys Gln Ser
        210                  215                220

Gln Phe Lys Pro Ala Val Phe Asp Phe Pro Ser Gln Asp Val Phe Thr
225                  230                235                240

Val Glu Pro Gln Phe Asp Thr Ala Leu Gly Gln Tyr Phe Cys Ser Ile
            245                  250                255

Thr Met His Arg Leu Thr Asp Lys Gln Arg Lys His Leu Ser Met Lys
        260                  265                270

Lys Thr Ala Leu Val Val Ser Ala Ser Leu Ser Ser Ser His Phe Ser
        275                  280                285

Thr Glu Gln Val Gly Ala Glu Val Pro Phe Ser Pro Gly Leu Phe Ala
        290                  295                300

Asp Gln Ala Glu Ile Leu Leu Ser Asn His Tyr Thr Ser Ser Glu Ile
305                  310                315                320

Arg Val Phe Gly Ala Pro Glu Val Leu Glu Asn Leu Glu Val Lys Ser
            325                  330                335

Gly Ser Pro Ala Val Leu Ala Phe Ala Lys Glu Lys Ser Phe Gly Trp
        340                  345                350

Pro Ser Phe Ile Thr Tyr Thr Val Gly Val Leu Asp Pro Ala Ala Gly
        355                  360                365

Ser Gln Gly Pro Leu Ser Thr Thr Leu Thr Phe Ser Ser Pro Val Thr
370                  375                380

Asn Gln Ala Ile Ala Ile Pro Val Thr Val Ala Phe Val Xaa Asp Arg
385                  390                395                400

Arg Gly Pro Gly Pro Tyr Gly Ala Ser Leu Phe Gln His Phe Leu Asp
                405                  410                415

Ser Tyr Gln Val Met Phe Phe Thr Leu Phe Ala Leu Leu Ala Gly Thr
        420                  425                430

Ala Val Met Ile Ile Ala Tyr His Thr Val Cys Thr Pro Arg Asp Leu
        435                  440                445

Ala Val Pro Ala Ala Leu Thr Pro Arg Ala Ser Pro Gly His Ser Pro
450                  455                460

His Tyr Phe Ala Ala Ser Ser Pro Thr Ser Pro Asn Ala Leu Pro Pro
465                  470                475                480

Ala Arg Lys Ala Ser Pro Pro Ser Gly Leu Trp Ser Pro Ala Tyr Ala
                485                  490                495

Ser His
```

<210> 905
<211> 886
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (26)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (216)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (234)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (275)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (871)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 905
Met Ala Ala Arg Gly Arg Gly Leu Leu Leu Thr Leu Ser Val Leu
1   5   10   15

Leu Ala Ala Gly Pro Ser Ala Ala Ala Xaa Lys Leu Asn Ile Pro Lys
            20   25   30

Val Leu Leu Pro Phe Thr Arg Ala Thr Arg Val Asn Phe Thr Leu Glu
        35   40   45

Ala Ser Glu Gly Cys Tyr Arg Trp Leu Ser Thr Arg Pro Glu Val Ala
    50   55   60

Ser Ile Glu Pro Leu Gly Leu Asp Glu Gln Gln Cys Ser Gln Lys Ala
65   70   75   80

Val Val Gln Ala Arg Leu Thr Gln Pro Ala Arg Leu Thr Ser Ile Ile
                85   90   95

Phe Ala Glu Asp Ile Thr Thr Gly Gln Val Leu Arg Cys Asp Ala Ile
            100   105   110

Val Asp Leu Ile His Asp Ile Gln Ile Val Ser Thr Thr Arg Glu Leu
        115   120   125

Tyr Leu Glu Asp Ser Pro Leu Glu Leu Lys Ile Gln Ala Leu Asp Ser
    130   135   140

488

Glu Gly Asn Thr Phe Ser Thr Leu Ala Gly Leu Val Phe Glu Trp Thr
145   150   155   160

Ile Val Lys Asp Ser Glu Ala Asp Arg Phe Ser Asp Ser His Asn Ala
                165   170   175

Leu Arg Ile Leu Thr Phe Leu Glu Ser Thr Tyr Ile Pro Pro Ser Tyr
            180   185   190

Ile Ser Glu Met Glu Lys Ala Ala Lys Gln Gly Asp Thr Ile Leu Val
        195   200   205

Ser Gly Met Lys Thr Gly Ser Xaa Lys Leu Lys Ala Arg Ile Gln Glu
    210   215   220

Ala Val Tyr Lys Asn Val Arg Pro Ala Xaa Val Arg Leu Leu Ile Leu
225   230   235   240

Glu Asn Ile Leu Leu Asn Pro Ala Tyr Asp Val Tyr Leu Met Val Gly
                245   250   255

Thr Ser Ile His Tyr Lys Val Gln Lys Ile Arg Gln Gly Lys Ile Thr
            260   265   270

Glu Leu Xaa Met Pro Ser Asp Gln Tyr Glu Leu Gln Leu Gln Asn Ser
        275   280   285

Ile Pro Gly Pro Glu Gly Asp Pro Thr Arg Pro Val Ala Val Leu Ala
    290   295   300

Gln Asp Thr Ser Met Val Thr Ala Leu Gln Leu Gly Gln Ser Ser Leu
305   310   315   320

Val Leu Gly His Arg Ser Ile Arg Met Gln Gly Ala Ser Arg Leu Pro
            325   330   335

Asn Ser Thr Ile Tyr Val Val Glu Pro Gly Tyr Leu Gly Phe Thr Val
            340   345   350

His Pro Gly Asp Arg Trp Val Leu Glu Thr Gly Arg Leu Tyr Glu Ile
    355   360   365

Thr Ile Glu Val Phe Asp Lys Phe Ser Asn Lys Val Tyr Val Ser Asp
    370   375   380

Asn Ile Arg Ile Glu Thr Val Leu Pro Ala Glu Phe Phe Glu Val Leu
385   390   395   400

Ser Ser Ser Gln Asn Gly Ser Tyr His Arg Ile Arg Ala Leu Lys Arg
                405   410   415

Gly Gln Thr Ala Ile Asp Ala Ala Leu Thr Ser Val Val Asp Gln Asp
            420   425   430

Gly Gly Val His Ile Leu Gln Val Pro Val Trp Asn Gln Gln Glu Val
            435   440   445

Glu Ile His Ile Pro Ile Thr Leu Tyr Pro Ser Ile Leu Thr Phe Pro
    450   455   460

489

```
Trp Gln Pro Lys Thr Gly Ala Tyr Gln Tyr Thr Ile Arg Ala His Gly
465                 470             475                     480 ,

Gly Ser Gly Asn Phe Ser Trp Ser Ser Ser His Leu Val Ala Thr
                485             490                 495

Val Thr Val Lys Gly Val Met Thr Thr Gly Ser Asp Ile Gly Phe Ser
            500             505             510

Val Ile Gln Ala His Asp Val Gln Asn Pro Leu His Phe Gly Glu Met
            515 ·             520  ·             525 · ·

Lys Val Tyr Val Ile Glu Pro His Ser Met Glu Phe Ala Pro Cys Gln
530             535                 540

Val Glu Ala Arg Val Gly Gln Ala Leu Glu Leu Pro Leu Arg Ile Ser
545             550                 555                     560

Gly Leu Met Pro Gly Gly Ala Ser Glu Val Val Thr Leu Ser Asp Cys
            565             570                 575

Ser His Phe Asp Leu Ala Val Glu Val Glu Asn Gln Gly Val Phe Gln
            580             585                 590

Pro Leu Pro Gly Arg Leu Pro Pro Gly Ser Glu His Cys Ser Gly Val
    595             600                 605

Arg Val Lys Ala Glu Ala Gln Gly Ser Thr Thr Leu Leu Val Ser Tyr
    610             615                 620

Arg His Gly His Val His Leu Ser Ala Lys Ile Thr Ile Ala Ala Tyr
625             · 630             635                     640

Leu Pro Leu Lys Ala Val Asp Pro Ser Ser Val Ala Leu Val Thr Leu
            645             650                 655

Gly Ser Ser Lys Glu Met Leu Phe Glu Gly Gly Pro Arg Pro Trp Ile
            660             665                 670

Leu Glu Pro Ser Lys Phe Phe Gln Asn Val Thr Ala Glu Asp Thr Asp
    675             680                 685

Ser Ile Gly Leu Ala Leu Phe Ala Pro His Ser Ser Arg Asn Tyr Gln
    690             · 695             700

Gln His Trp Ile Leu Val Thr Cys Gln Ala Leu Gly Glu Gln Val Ile
705             710             715                     720

Ala Leu Ser Val Gly Asn Lys Pro Ser Leu Thr Asn Pro Phe Pro Ala
                725             730                 735

Val Glu Pro Ala Val Val Lys Phe Val Cys Ala Pro Pro Ser Arg Leu
            740             745                 750

Thr Leu Val Pro Val Tyr Thr Ser Pro Gln Leu Asp Met Ser Cys Pro
            755             760                 765

Leu Leu Gln Gln Asn Lys Gln Val Val Pro Val Ser Ser His Arg Asn
    770             775                 780
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                                    .490

Pro Leu Leu Asp Leu Ala Ala Tyr Asp Gln Glu Gly Arg Arg Phe Asp
785   790   795   800

Asn Phe Ser Ser Leu Ser Ile Gln Trp Glu Ser Thr Arg Pro Val Leu
                805   810   815

Ala Ser Ile Glu Pro Glu Leu Pro Met Gln Leu Val Ser Gln Asp Asp
            820   825   830

Glu Ser Gly Gln Lys Lys Leu His Gly Leu Gln Ala Ile Leu Val His
        835   840   845

Glu Ala Ser Gly Thr Thr Ala Ser Leu Pro Leu Pro Leu Ala Thr Arg
    850   855   860

Ser Pro Thr Ser Ala Leu Xaa Glu Gln Ser Ser Arg Met Thr Leu Trp
865   870   875   880

Cys Leu Cys Arg Pro Pro
            885

<210> 906
<211> 1887
<212> PRT
<213> Homo sapiens

<400> 906
Met Ala Ala Arg Gly Arg Gly Leu Leu Leu Leu Thr Leu Ser Val Leu
  1   5   10   15

Leu Ala Ala Gly Pro Ser Ala Ala Ala Lys Leu Asn Ile Pro Lys
            20   25   30

Val Leu Leu Pro Phe Thr Arg Ala Thr Arg Val Asn Phe Thr Leu Glu
        35   40   45

Ala Ser Glu Gly Cys Tyr Arg Trp Leu Ser Thr Arg Pro Glu Val Ala
    50   55   60

Ser Ile Glu Pro Leu Gly Leu Asp Glu Gln Gln Cys Ser Gln Lys Ala
65   70   75   80

Val Val Gln Ala Arg Leu Thr Gln Pro Ala Arg Leu Thr Ser Ile Ile
            85   90   95

Phe Ala Glu Asp Ile Thr Thr Gly Gln Val Leu Arg Cys Asp Ala Ile
            100   105   110

Val Asp Leu Ile His Asp Ile Gln Ile Val Ser Thr Thr Arg Glu Leu
        115   120   125

Tyr Leu Glu Asp Ser Pro Leu Glu Leu Lys Ile Gln Ala Leu Asp Ser
    130   135   140

Glu Gly Asn Thr Phe Ser Thr Leu Ala Gly Leu Val Phe Glu Trp Thr
145   150   155   160

Ile Val Lys Asp Ser Glu Ala Asp Arg Phe Ser Asp Ser His Asn Ala

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                        165                   170                   175

    Leu Arg Ile Leu Thr Phe Leu Glu Ser Thr Tyr Ile Pro Pro Ser Tyr
                180                   185                   190

    Ile Ser Glu Met Glu Lys Ala Ala Lys Gln Gly Asp Thr Ile Leu Val
                195                   200                   205

    Ser Gly Met Lys Thr Gly Ser Ser Lys Leu Lys Ala Arg Ile Gln Glu
        210                   215                   220

    Ala Val Tyr Lys Asn Val Arg Pro Ala Glu Val Arg Leu Leu Ile Leu
    225                   230                   235                   240

    Glu Asn Ile Leu Leu Asn Pro Ala Tyr Asp Val Tyr Leu Met Val Gly
                245                   250                   255

    Thr Ser Ile His Tyr Lys Val Gln Lys Ile Arg Gln Gly Lys Ile Thr
                260                   265                   270

    Glu Leu Ser Met Pro Ser Asp Gln Tyr Glu Leu Gln Leu Gln Asn Ser
                275                   280                   285

    Ile Pro Gly Pro Glu Gly Asp Pro Thr Arg Pro Val Ala Val Leu Ala
        290                   295                   300

    Gln Asp Thr Ser Met Val Thr Ala Leu Gln Leu Gly Gln Ser Ser Leu
    305                   310                   315                   320

    Val Leu Gly His Arg Ser Ile Arg Met Gln Gly Ala Ser Arg Leu Pro
                325                   330                   335

    Asn Ser Thr Ile Tyr Val Val Glu Pro Gly Tyr Leu Gly Phe Thr Val
                340                   345                   350

    His Pro Gly Asp Arg Trp Val Leu Glu Thr Gly Arg Leu Tyr Glu Ile
                355                   360                   365

    Thr Ile Glu Val Phe Asp Lys Phe Ser Asn Lys Val Tyr Val Ser Asp
        370                   375                   380

    Asn Ile Arg Ile Glu Thr Val Leu Pro Ala Glu Phe Phe Glu Val Leu
    385                   390                   395                   400

    Ser Ser Ser Gln Asn Gly Ser Tyr His Arg Ile Arg Ala Leu Lys Arg
                405                   410                   415

    Gly Gln Thr Ala Ile Asp Ala Ala Leu Thr Ser Val Val Asp Gln Asp
                420                   425                   430

    Gly Gly Val His Ile Leu Gln Val Pro Val Trp Asn Gln Gln Glu Val
                435                   440                   445

    Glu Ile His Ile Pro Ile Thr Leu Tyr Pro Ser Ile Leu Thr Phe Pro
        450                   455                   460

    Trp Gln Pro Lys Thr Gly Ala Tyr Gln Tyr Thr Ile Arg Ala His Gly
    465                   470                   475                   480

    Gly Ser Gly Asn Phe Ser Trp Ser Ser Ser Ser His Leu Val Ala Thr
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492

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                        485                    490                    495

Val Thr Val Lys Gly Val Met Thr Thr Gly Ser Asp Ile Gly Phe Ser
            500                    505                    510

Val Ile Gln Ala His Asp Val Gln Asn Pro Leu His Phe Gly Glu Met
            515                    520                    525

Lys Val Tyr Val Ile Glu Pro His Ser Met Glu Phe Ala Pro Cys Gln
        530                    535                    540

Val Glu Ala Arg Val Gly Gln Ala Leu Glu Leu Pro Leu Arg Ile Ser
545                    550                    555                    560

Gly Leu Met Pro Gly Gly Ala Ser Glu Val Val Thr Leu Ser Asp Cys
                565                    570                    575

Ser His Phe Asp Leu Ala Val Glu Val Glu Asn Gln Gly Val Phe Gln
            580                    585                    590

Pro Leu Pro Gly Arg Leu Pro Pro Gly Ser Glu His Cys Ser Gly Val
        595                    600                    605

Arg Val Lys Ala Glu Ala Gln Gly Ser Thr Thr Leu Leu Val Ser Tyr
    610                    615                    620

Arg His Gly His Val His Leu Ser Ala Lys Ile Thr Ile Ala Ala Tyr
625                    630                    635                    640

Leu Pro Leu Lys Ala Val Asp Pro Ser Ser Val Ala Leu Val Thr Leu
            645                    650                    655

Gly Ser Ser Lys Glu Met Leu Phe Glu Gly Gly Pro Arg Pro Trp Ile
            660                    665                    670

Leu Glu Pro Ser Lys Phe Phe Gln Asn Val Thr Ala Glu Asp Thr Asp
        675                    680                    685

Ser Ile Gly Leu Ala Leu Phe Ala Pro His Ser Ser Arg Asn Tyr Gln
    690                    695                    700

Gln His Trp Ile Leu Val Thr Cys Gln Ala Leu Gly Glu Gln Val Ile
705                    710                    715                    720

Ala Leu Ser Val Gly Asn Lys Pro Ser Leu Thr Asn Pro Phe Pro Ala
            725                    730                    735

Val Glu Pro Ala Val Val Lys Phe Val Cys Ala Pro Pro Ser Arg Leu
            740                    745                    750

Thr Leu Val Pro Val Tyr Thr Ser Pro Gln Leu Asp Met Ser Cys Pro
        755                    760                    765

Leu Leu Gln Gln Asn Lys Gln Val Val Pro Val Ser Ser His Arg Asn
    770                    775                    780

Pro Leu Leu Asp Leu Ala Ala Tyr Asp Gln Glu Gly Arg Arg Phe Asp
785                    790                    795                    800

Asn Phe Ser Ser Leu Ser Ile Gln Trp Glu Ser Thr Arg Pro Val Leu
                        493
```

                    805   810   815

Ala Ser Ile Glu Pro Glu Leu Pro Met Gln Leu Val Ser Gln Asp Asp
              820   825   830

Glu Ser Gly Gln Lys Lys Leu His Gly Leu Gln Ala Ile Leu Val His
    835   840   845

Glu Ala Ser Gly Thr Thr Ala Ile Thr Ala Thr Ala Thr Gly Tyr Gln
850   855   860

Glu Ser His Leu Ser Ser Ala Arg Thr Lys Gln Pro His Asp Pro Leu
865   870   875   880

Val Pro Leu Ser Ala Ser Ile Glu Leu Ile Leu Val Glu Asp Val Arg
              885   890   895

Val Ser Pro Glu Glu Val Thr Ile Tyr Asn His Pro Gly Ile Gln Ala
          900   905   910

Glu Leu Arg Ile Arg Glu Gly Ser Gly Tyr Phe Phe Leu Asn Thr Ser
          915   920   925

Thr Ala Asp Val Val Lys Val Ala Tyr Gln Glu Ala Arg Gly Val Ala
    930   935   940

Met Val His Pro Leu Leu Pro Gly Ser Ser Thr Ile Met Ile His Asp
945   950   955   960

Leu Cys Leu Val Phe Pro Ala Pro Ala Lys Ala Val Val Tyr Val Ser
              965   970   975

Asp Ile Gln Glu Leu Tyr Ile Arg Val Val Asp Lys Val Glu Ile Gly
          980   985   990

Lys Thr Val Lys Ala Tyr Val Arg Val Leu Asp Leu His Lys Lys Pro
          995   1000   1005

Phe Leu Ala Lys Tyr Phe Pro Phe Met Asp Leu Lys Leu Arg Ala Ala
    1010   1015   1020

Ser Pro Ile Ile Thr Leu Val Ala Leu Asp Glu Ala Leu Asp Asn Tyr
1025   1030   1035   1040

Thr Ile Thr Phe Leu Ile Arg Gly Val Ala Ile Gly Gln Thr Ser Leu
          1045   1050   1055

Thr Ala Ser Val Thr Asn Lys Ala Gly Gln Arg Ile Asn Ser Ala Pro
          1060   1065   1070

Gln Gln Ile Glu Val Phe Pro Pro Phe Arg Leu Met Pro Arg Lys Val
    1075   1080   1085

Thr Leu Leu Ile Gly Ala Thr Met Gln Val Thr Ser Glu Gly Gly Pro
    1090   1095   1100

Gln Pro Gln Ser Asn Ile Leu Phe Ser Ile Ser Asn Glu Ser Val Ala
1105   1110   1115   1120

Leu Val Ser Ala Ala Gly Leu Val Gln Gly Leu Ala Ile Gly Asn Gly
                              494

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                1125                   1130                   1135

    Thr Val Ser Gly  Leu Val Gln Ala Val  Asp Ala Glu Thr Gly  Lys Val
                1140          1145                   1150

    Val Ile Ile  Ser Gln Asp Leu Val  Gln Val Glu Val Leu  Leu Leu Arg
                1155          1160                   1165

    Ala Val Arg Ile Arg Ala Pro  Ile Met Arg Met Arg  Thr Gly Thr Gln
        1170              1175                   1180

    Met Pro Ile Tyr Val Thr  Gly Ile Thr Asn His  Gln Asn Pro Phe Ser
    1185              1190                   1195                   1200

    Phe Gly Asn Ala Val  Pro Gly Leu Thr Phe  His Trp Ser Val Thr  Lys
                1205              1210                   1215

    Arg Asp Val Leu  Asp Leu Arg Gly Arg  His His Glu Ala Ser  Ile Arg
                1220              1225                   1230

    Leu Pro Ser  Gln Tyr Asn Phe Ala  Met Asn Val Leu Gly  Arg Val Lys
            1235              1240                   1245

    Gly Arg  Thr Gly Leu Arg Val  Val Val Lys Ala Val  Asp Pro Thr Ser
        1250              1255                   1260

    Gly  Gln Leu Tyr Gly Leu  Ala Arg Glu Leu Ser  Asp Glu Ile Gln Val
    1265              1270                   1275                   1280

    Gln Val Phe Glu Lys  Leu Gln Leu Leu Asn  Pro Glu Ile Glu Ala  Glu
                1285                   1290                   1295

    Gln Ile Leu Met  Ser Pro Asn Ser Tyr  Ile Lys Leu Gln Thr  Asn Arg
            1300              1305                   1310

    Asp Gly Ala  Ala Ser Leu Ser Tyr  Arg Val Leu Asp Gly  Pro Glu Lys
        1315              1320                   1325

    Val Pro  Val Val His Val Asp  Glu Lys Gly Phe Leu  Ala Ser Gly Ser
        1330              1335                   1340

    Met  Ile Gly Thr Ser Thr  Ile Gly Val Ile Ala  Gln Glu Pro Phe Gly
    1345              1350                   1355                   1360

    Ala Asn Gln Thr Ile  Ile Val Ala Val Lys  Val Ser Pro Val Ser  Tyr
                1365              1370                   1375

    Leu Arg Val Ser  Met Ser Pro Val Leu  His Thr Gln Asn Lys  Glu Ala
            1380              1385                   1390

    Leu Val Ala  Val Pro Leu Gly Met  Thr Val Thr Phe Thr  Val His Phe
        1395              1400                   1405

    His Asp  Asn Ser Gly Asp Val  Phe His Ala His Ser  Ser Val Leu Asn
        1410              1415                   1420

    Phe  Ala Thr Asn Arg Asp  Asp Phe Val Gln Ile  Gly Lys Gly Pro Thr
    1425              1430                   1435                   1440

    Asn Asn Thr Cys Val  Val Arg Thr Val Ser  Val Gly Leu Thr Leu  Leu
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                        1445   1450   1455

Arg Val Trp Asp Ala Glu His Pro Gly Leu Ser Asp Phe Met Pro Leu
             1460   1465   1470

Pro Val Leu Gln Ala Ile Ser Pro Glu Leu Ser Gly Ala Met Val Val
         1475   1480   1485

Gly Asp Val Leu Cys Leu Ala Thr Val Leu Thr Ser Leu Glu Gly Leu
    1490   1495   1500

Ser Gly Thr Trp Ser Ser Ser Ala Asn Ser Ile Leu His Ile Asp Pro
1505   1510   1515   1520

Lys Thr Gly Val Ala Val Ala Arg Ala Val Gly Ser Val Thr Val Tyr
             1525   1530   1535

Tyr Glu Val Ala Gly His Leu Arg Thr Tyr Lys Glu Val Val Val Ser
         1540   1545   1550

Val Pro Gln Arg Ile Met Ala Arg His Leu His Pro Ile Gln Thr Ser
         1555   1560   1565

Phe Gln Glu Ala Thr Ala Ser Lys Val Ile Val Ala Val Gly Asp Arg
    1570   1575   1580

Ser Ser Asn Leu Arg Gly Glu Cys Thr Pro Thr Gln Arg Glu Val Ile
1585   1590   1595   1600

Gln Ala Leu His Pro Glu Thr Leu Ile Ser Cys Gln Ser Gln Phe Lys
             1605   1610   1615

Pro Ala Val Phe Asp Phe Pro Ser Gln Asp Val Phe Thr Val Glu Pro
         1620   1625   1630

Gln Phe Asp Thr Ala Leu Gly Gln Tyr Phe Cys Ser Ile Thr Met His
    1635   1640   1645

Arg Leu Thr Asp Lys Gln Arg Lys His Leu Ser Met Lys Lys Thr Ala
    1650   1655   1660

Leu Val Val Ser Ala Ser Leu Ser Ser Ser His Phe Ser Thr Glu Gln
1665   1670   1675   1680

Val Gly Ala Glu Val Pro Phe Ser Pro Gly Leu Phe Ala Asp Gln Ala
             1685   1690   1695

Glu Ile Leu Leu Ser Asn His Tyr Thr Ser Ser Glu Ile Arg Val Phe
         1700   1705   1710

Gly Ala Pro Glu Val Leu Glu Asn Leu Glu Val Lys Ser Gly Ser Pro
    1715   1720   1725

Ala Val Leu Ala Phe Ala Lys Glu Lys Ser Phe Gly Trp Pro Ser Phe
    1730   1735   1740

Ile Thr Tyr Thr Val Gly Val Leu Asp Pro Ala Ala Gly Ser Gln Gly
1745   1750   1755   1760

Pro Leu Ser Thr Thr Leu Thr Phe Ser Ser Pro Val Thr Asn Gln Ala

                                    496

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                 1765                  1770                  1775

 Ile Ala Ile Pro  Val Thr Val Ala Phe  Val Val Asp Arg Arg  Gly Pro
             1780                  1785                  1790

 Gly Pro Tyr  Gly Ala Ser Leu Phe  Gln His Phe Leu Asp  Ser Tyr Gln
         1795                  1800                  1805

 Val Met  Phe Phe Thr Leu Phe  Ala Leu Leu Ala Gly  Thr Ala Val Met
     1810                  1815                  1820

 Ile  Ile Ala Tyr His Thr  Val Cys Thr Pro Arg  Asp Leu Ala Val Pro
 1825                  1830                  1835                  1840

 Ala Ala Leu Thr Pro  Arg Ala Ser Pro Gly  His Ser Pro His Tyr  Phe
             1845                  1850                  1855

 Ala Ala Ser Ser  Pro Thr Ser Pro Asn  Ala Leu Pro Pro Ala  Arg Lys
         1860                  1865                  1870

 Ala Ser Pro  Pro Ser Gly Leu Trp  Ser Pro Ala Tyr Ala  Ser His
         1875                  1880                  1885
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<210> 907
<211> 16
<212> PRT
<213> Homo sapiens

<400> 907
Pro Leu Cys Leu Ala Leu Glu Leu Gly Trp Val Cys Leu Ser Ser Thr
  1               5                  10                  15




<210> 908
<211> 302
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (262)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (279)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (294)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<221> SITE
<222> (295)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 908
Met Leu Leu Leu Trp Lys Asn Phe Met Tyr Arg Arg Arg Gln Pro Val
1               5                   10                  15

Gln Leu Leu Val Glu Leu Leu Trp Pro Leu Phe Leu Phe Phe Ile Leu
                20                  25                  30

Val Ala Val Arg His Ser His Pro Pro Leu Glu His His Glu Cys His
            35                  40                  45

Phe Pro Asn Lys Pro Leu Pro Ser Ala Gly Thr Val Pro Trp Leu Gln
    50                  55                  60

Gly Leu Ile Cys Asn Val Asn Asn Thr Cys Phe Pro Gln Leu Thr Pro
65                  70                  75                  80

Gly Glu Glu Pro Gly Arg Leu Ser Asn Phe Asn Asp Ser Leu Val Ser
                85                  90                  95

Arg Leu Leu Ala Asp Ala Arg Thr Val Leu Gly Gly Ala Ser Ala His
            100                 105                 110

Arg Thr Leu Ala Gly Leu Gly Lys Leu Ile Ala Thr Leu Arg Ala Ala
        115                 120                 125

Arg Ser Thr Ala Gln Pro Gln Pro Thr Lys Gln Ser Pro Leu Glu Pro
    130                 135                 140

Pro Met Leu Asp Val Ala Glu Leu Leu Thr Ser Leu Leu Arg Thr Glu
145                 150                 155                 160

Ser Leu Gly Leu Ala Leu Gly Gln Ala Gln Glu Pro Leu His Ser Leu
                165                 170                 175

Leu Glu Ala Ala Glu Asp Leu Ala Gln Glu Leu Leu Ala Leu Arg Ser
            180                 185                 190

Leu Val Glu Leu Arg Ala Leu Leu Gln Arg Pro Arg Gly Thr Ser Gly
        195                 200                 205

Pro Leu Glu Leu Leu Ser Glu Ala Leu Cys Ser Val Arg Gly Pro Ser
    210                 215                 220

Ser Thr Val Gly Pro Ser Leu Asn Trp Tyr Glu Ala Ser Asp Leu Met
225                 230                 235                 240

Glu Leu Val Gly Gln Glu Pro Glu Ser Ala Cys Arg Gln Gln Leu Ser
                245                 250                 255

Pro Leu Leu Gly Ala Xaa Trp Ser Leu Asp Ser Thr Arg Cys Pro Leu
            260                 265                 270

Val Trp Asn Ala Glu Ala Xaa Ser Ser Glu Val Leu Leu Thr Asp His
    275                 280                 285

Phe Thr Glu Val Met Xaa Xaa Glu Arg Leu Gln Ser Tyr Leu
```

498

          290   295   300
            .
            .

<210> 909
<211> 37
<212> PRT
<213> Homo sapiens

<400> 909
Leu Pro Trp Leu Pro Phe Phe Phe Ser Cys Leu Val Ser Thr Leu Pro
  1   5   10   15

Ser Met Ser Val Ser Ala Phe Ser Leu Val Val Arg Gly Arg Arg Ala
            20   25   30

Phe Thr Ser Val Arg
        35

<210> 910
<211> 181
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (80)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (151)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (162)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 910
Pro Lys Thr Ser Pro Ser Pro Glu Val Ser Tyr Thr Thr Pro Ala Pro
  1   5   10   15

Lys Asp Val Leu Leu Pro His Lys Pro Tyr Pro Glu Val Ser Gln Ser
            20   25   30

Glu Pro Ala Pro Leu Glu Thr Arg Gly Ile Pro Phe Ile Pro Met Ile
        35   40   45

Ser Pro Ser Pro Ser Gln Glu Glu Leu Gln Thr Thr Leu Glu Glu Thr
    50   55   60

Asp Gln Ser Thr Gln Glu Pro Phe Thr Thr Lys Ile Pro Arg Thr Xaa
  65   70   75   80

Glu Leu Ala Lys Thr Thr Gln Ala Pro His Arg Phe Tyr Thr Thr Val
                85   90   95

Arg Pro Arg Thr Ser Asp Lys Pro His Ile Arg Pro Val Leu Asn Arg
            100   105   110

Thr Thr Thr Arg Pro Thr Arg Pro Lys Pro Ser Gly Met Pro Ser Gly
        115   120   125

Asn Gly Val Gly Thr Gly Val Lys Gln Ala Pro Arg Pro Ser Gly Ala
    130   135   140

Asp Arg Asn Val Ser Val Xaa Ser Thr His Pro Thr Lys Lys Pro Gly
145   150   155   160

Thr Xaa Arg Pro Pro Leu Pro Pro Ser Arg Arg Gly Arg Glu Phe Pro
                165   170   175

Gly Arg Arg Ala His
            180

<210> 911
<211> 161
<212> PRT
<213> Homo sapiens

<400> 911
Met Leu Ser Ser Leu Gly Cys Leu Leu Leu Cys Gly Ser Ile Thr Leu
1   5   10   15

Ala Leu Gly Asn Ala Gln Lys Leu Pro Lys Gly Lys Arg Pro Asn Leu
            20   25   30

Lys Val His Ile Asn Thr Thr Ser Asp Ser Ile Leu Leu Lys Phe Leu
        35   40   45

Arg Pro Ser Pro Asn Val Lys Leu Glu Gly Leu Leu Leu Gly Tyr Gly
    50   55   60

Ser Asn Val Ser Pro Asn Gln Tyr Phe Pro Leu Pro Ala Glu Gly Lys
65   70   75   80

Phe Thr Glu Ala Ile Val Asp Ala Glu Pro Lys Tyr Leu Ile Val Val
            85   90   95

Arg Pro Ala Pro Pro Ser Gln Lys Lys Ser Cys Ser Gly Lys Thr
            100   105   110

Arg Ser Arg Lys Pro Leu Gln Leu Val Val Gly Thr Leu Thr Pro Ser
        115   120   125

Ser Val Phe Leu Ser Trp Gly Phe Leu Ile Asn Pro His His Asp Trp
    130   135   140

Thr Leu Pro Ser His Cys Pro Asn Asp Arg Phe Tyr Thr Ile Arg Tyr
145   150   155   160

Arg

<210> 912
<211> 778
<212> PRT
<213> Homo sapiens

<400> 912
Met Leu Ser Ser Leu Gly Cys Leu Leu Leu Cys Gly Ser Ile Thr Leu
 1   5   10   15

Ala Leu Gly Asn Ala Gln Lys Leu Pro Lys Gly Lys Arg Pro Asn Leu
            20   25   30

Lys Val His Ile Asn Thr Thr Ser Asp Ser Ile Leu Leu Lys Phe Leu
        35   40   45

Arg Pro Ser Pro Asn Val Lys Leu Glu Gly Leu Leu Leu Gly Tyr Gly
    50   55   60

Ser Asn Val Ser Pro Asn Gln Tyr Phe Pro Leu Pro Ala Glu Gly Lys
65   70   75   80

Phe Thr Glu Ala Ile Val Asp Ala Glu Pro Lys Tyr Leu Ile Val Val
                85   90   95

Arg Pro Ala Pro Pro Pro Ser Gln Lys Lys Ser Cys Ser Gly Lys Thr
            100   105   110

Arg Ser Arg Lys Pro Leu Gln Leu Val Val Gly Thr Leu Thr Pro Ser
        115   120   125

Ser Val Phe Leu Ser Trp Gly Phe Leu Ile Asn Pro His His Asp Trp
    130   135   140

Thr Leu Pro Ser His Cys Pro Asn Asp Arg Phe Tyr Thr Ile Arg Tyr
145   150   155   160

Arg Glu Lys Asp Lys Glu Lys Lys Trp Ile Phe Gln Ile Cys Pro Ala
                165   170   175

Thr Glu Thr Ile Val Glu Asn Leu Lys Pro Asn Thr Val Tyr Glu Phe
            180   185   190

Gly Val Lys Asp Asn Val Glu Gly Gly Ile Trp Ser Lys Ile Phe Asn
        195   200   205

His Lys Thr Val Val Gly Ser Lys Lys Val Asn Gly Lys Ile Gln Ser
    210   215   220

Thr Tyr Asp Gln Asp His Thr Val Pro Ala Tyr Val Pro Arg Lys Leu
225   230   235   240

Ile Pro Ile Thr Ile Ile Lys Gln Val Ile Gln Asn Val Thr His Lys
                245   250   255

Asp Ser Ala Lys Ser Pro Glu Lys Ala Pro Leu Gly Gly Val Ile Leu
            260   265   270

Val His Leu Ile Ile Pro Gly Leu Asn Glu Thr Thr Val Lys Leu Pro
    275   280   285

Ala Ser Leu Met Phe Glu Ile Ser Asp Ala Leu Lys Thr Gln Leu Ala
    290   295   300

Lys Asn Glu Thr Leu Ala Leu Pro Ala Glu Ser Lys Thr Pro Glu Val
305   310   315   320

Glu Lys Ile Ser Ala Arg Pro Thr Thr Val Thr Pro Glu Thr Val Pro
                325   330   335

Arg Ser Thr Lys Pro Thr Thr Ser Ser Ala Leu Asp Val Ser Glu Thr
            340   345   350

Thr Leu Val Leu Ser Lys Arg Thr Pro Glu Thr Leu Gln Thr Ile Leu
        355   360   365

Ile Pro Gln Phe Glu Leu Pro Leu Ser Thr Leu Ala Pro Lys Ser Leu
    370   375   380

Pro Glu Phe Pro Glu Ala Lys Thr Pro Phe Pro Phe Glu Lys Pro Arg
385   390   395   400

Gly Thr Leu Ala Ser Ser Glu Lys Pro Trp Ile Val Pro Thr Ala Lys
            405   410   415

Ile Ser Glu Asp Ser Lys Val Leu Gln Pro Gln Thr Ala Thr Tyr Asp
            420   425   430

Val Phe Ser Ser Pro Thr Thr Ser Asp Glu Pro Glu Ile Ser Asp Ser
        435   440   445

Tyr Thr Ala Thr Ser Asp Arg Ile Leu Asp Ser Ile Pro Pro Lys Thr
    450   455   460

Ser Arg Thr Leu Glu Gln Pro Arg Ala Thr Leu Ala Pro Ser Glu Thr
465   470   475   480

Pro Phe Val Pro Gln Lys Leu Glu Ile Phe Thr Ser Pro Glu Met Gln
            485   490   495

Pro Thr Thr Pro Ala Pro Gln Gln Thr Thr Ser Ile Pro Ser Thr Pro
            500   505   510

Lys Arg Arg Pro Arg Pro Lys Pro Pro Arg Thr Lys Pro Glu Arg Thr
        515   520   525

Thr Ser Ala Gly Thr Ile Thr Pro Lys Ile Ser Lys Ser Pro Glu Pro
    530   535   540

Thr Trp Thr Thr Pro Ala Pro Gly Lys Thr Gln Phe Ile Ser Leu Lys
545   550   555   560

Pro Lys Ile Pro Leu Ser Pro Glu Val Thr His Thr Lys Pro Ala Pro
            565   570   575

Lys Gln Thr Pro Arg Ala Pro Pro Lys Pro Lys Thr Ser Pro Arg Pro
            580   585   590

Arg Ile Pro Gln Thr Gln Pro Val Pro Lys Val Pro Gln Arg Val Thr
        595   600   605

502

```
Ala Lys Pro Lys Thr Ser Pro Ser Pro Glu Val Ser Tyr Thr Thr Pro
    610             615             620
Ala Pro Lys Asp Val Leu Leu Pro His Lys Pro Tyr Pro Glu Val Ser
625             630             635             640
Gln Ser Glu Pro Ala Pro Leu Glu Thr Arg Gly Ile Pro Phe Ile Pro
            645             650             655
Met Ile Ser Pro Ser Pro Ser Gln Glu Glu Leu Gln Thr Thr Leu Glu
        660             665             670
Glu Thr Asp Gln Ser Thr Gln Glu Pro Phe Thr Thr Lys Ile Pro Arg
        675             680             685
Thr Thr Glu Leu Ala Lys Thr Thr Gln Ala Pro His Arg Phe Tyr Thr
    690             695             700
Thr Val Arg Pro Arg Thr Ser Asp Lys Pro His Ile Arg Pro Val Leu
705             710             715             720
Asn Arg Thr Thr Thr Arg Pro Thr Arg Pro Lys Pro Ser Gly Met Pro
            725             730             735
Ser Gly Asn Gly Val Gly Thr Gly Val Lys Gln Ala Pro Arg Pro Ser
        740             745             750
Gly Ala Asp Arg Asn Val Ser Val Asp Ser Thr His Pro Thr Lys Lys
        755             760             765
Pro Gly Thr Arg Arg Pro Pro Leu Pro Pro
    770             775
```

<210> 913
<211> 132
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (70)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 913

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Ser Phe Arg Thr Ala Pro Arg Gly Pro His Val Lys Glu Ser His Ala
  1             5             10                  15
Ser Gly Leu Leu Ser Asn Gln Ile Asn Leu Gln Ser Phe Asp Phe Lys
            20             25             30
Arg Met Leu Leu Cys Arg Leu Asn Ile Thr Gly Leu Cys Trp Gly Pro
        35             40             45
Lys Arg Thr Arg Cys Ala Leu Gly Gly Gln Thr Gly Leu Gln His His
    50             55             60
Pro Ser Asn Glu Lys Xaa Arg His Ser Gly Lys Glu Asp Leu Phe Leu
```

503

```
        65                        · 70                    75                      80
      Ser Ile Cys Leu Gly Trp Gly Thr Thr Val Asn Met Ala Cys Asn Asn
                        85              ·        90                  95

      Gln Arg Gly Arg Gly Tyr Gln Thr Gln Arg Asn Ser Ser Pro Val Tyr
                    . 100                    105              110

      Gln Glu Glu Leu Leu Phe Phe Cys Thr Ser Leu Phe Ser Arg Leu Phe
                115                    120              125

      Ser Leu Lys Gly
          130
```

```
. <210> 914
  <211> 33
. <212> PRT
  <213> Homo sapiens

  <400> 914
  Met Asn His Leu Ser Ile Ser Ile Ala Leu Phe Leu Leu Cys Cys Val·
   1               5                   10                  15

  His Leu Ser Leu Gly Leu Ser Val Phe Pro Phe Gln Glu Asp Arg Ser
            .       20      .           25          ·       30

  Val
```

```
  <210> 915
  <211> 102
  <212> PRT
  <213> Homo sapiens

  <400> 915
  Met Asn Tyr Leu His Cys Asn Val Leu Leu Thr Leu Phe Cys Leu Leu
   1               .5                  10          ·         15

  Phe Leu Leu His Ser Cys Ile Lys Ile Ile Lys His His Ser Gln Ala
                  20                  25              .   30

  Lys Arg Thr Arg Phe Pro Ser His Ile Ser His Lys Gly Glu Ala Asn
            35                  40                  45

  Thr His Gln Gly Gly Asn Tyr Thr Glu Leu Gly Trp Gly Leu Asp Ile
        50                  55                  60

  Tyr Phe Thr Ser Glu Leu Phe Ile Ser Ala Val Asn Leu Gly Glu Gly
   65              ·    70                  75    ·               80

  Leu Gly Glu Val Leu Ser Gly Glu Gln Arg Gly Pro Gly Gly Lys Leu
                  85          ·        90                  95

  Met Lys Thr Ser Asp Asp
                100
```

```
<210> 916
<211> 85
<212> PRT
<213> Homo sapiens

<400> 916
Ile Lys Thr Val Phe Leu Gly Gln Arg Tyr Thr Asp Pro Asn Phe Ile
1               5                   10                  15

Ala Val Val Phe Ile His Leu Pro Ile Asp Ile Leu Lys Ala Pro Ala
            20                  25                  30

Arg Pro Gly Thr Val Ala His Ala Cys Asn Leu Ser Thr Leu Val Gly
        35                  40                  45

Arg Gly Gly Arg Ile Thr Arg Ser Arg Asp Gln Asp His Pro Gly Gln
    50                  55                  60

Arg Gly Glu Thr Leu Ser Leu Leu Lys Ile Gln Lys Leu Ala Gly His
65                  70                  75                  80

Gly Gly Ala Arg Leu
                85



<210> 917
<211> 33
<212> PRT
<213> Homo sapiens

<400> 917
Met Ile Ser Cys Leu Cys Asn Phe Ile Ala His Cys Val Ala Leu Val
1               5                   10                  15

Met Arg Thr Cys Met Leu Val Val Ser Ser Asn Phe Ala Pro Ser Phe
            20                  25                  30

Leu



<210> 918
<211> 33
<212> PRT
<213> Homo sapiens

<400> 918
Met Ile Ser Cys Leu Cys Asn Phe Ile Ala His Cys Val Ala Leu Val
1               5                   10                  15

Met Arg Thr Cys Met Leu Val Val Ser Ser Asn Phe Ala Pro Ser Phe
            20                  25                  30

Leu
```

<210> 919
<211> 101
<212> PRT
<213> Homo sapiens

<400> 919
Val Asp Pro Arg Val Arg Thr Ser Ser Arg Ser Arg Ala Ala Ala Leu
1   5   10   15

Phe Glu Cys Phe Leu Met Val Phe Leu Leu Lys Cys Gln Val Asn Asn
            20   25   30

Phe Asn Pro Ile Gln Gln Tyr Ser Leu Phe Pro Leu Lys Ser Ser Gly
        35   40   45

Thr Cys Ser Ile Ser Leu Phe Cys Met Arg Gly Leu Tyr Phe Cys Leu
    50   55   60

Gly Val Val Ile Cys Thr His Ala Ile Leu Leu Lys Pro Ser Cys Leu
65   70   75   80

Val Leu Phe Leu Glu Ser Phe Phe Phe Pro Val Leu Met Tyr Ala Gly
                85·   90   95

Phe Gly Asn Ser Ser
            100

<210> 920
<211> 60
<212> PRT
<213> Homo sapiens

<400> 920
Met Arg Lys Trp Gly Leu Met Lys Leu Ile Ala Ser Met Met Gln Pro
1   5   10   15

Val Leu Leu Glu Leu Leu Ser Val Trp Arg Lys Glu Gly Arg Asp Ser
            20   25   30

Arg Asn Ile His Asp Ser His Ser Met Tyr Val Leu Arg Lys Arg Leu
        35   40   45

Ser Gly Ser Trp Leu Gln Gln Val Cys Thr Leu Leu
    50   55   60

<210> 921
<211> 79
<212> PRT
<213> Homo sapiens

<400> 921
Met Arg Lys Trp Gly Leu Met Lys Leu Ile Ala Ser Met Met Gln Pro
1   5   10   15

```
Val Leu Leu Glu Leu Leu Ser Val Trp Arg Lys Glu Gly Arg Asp Ser
              20              25              30

Arg Asn Ile His Asp Ser His Ser Met Tyr Val Leu Arg Lys Arg Leu
         35              40              45

Ser Gly Ser Trp Leu Gln Ala Gly Leu Tyr Ser Thr Val Ile Ser Ala
     50              55              60

Ala Leu Ile Leu Glu Ser Pro Arg Ala Cys Leu Pro Ser Lys Gly
65              70              75
```

```
<210> 922
<211> 245
<212> PRT
<213> Homo sapiens

<400> 922
Met Ala Asp Val Ser Ala Lys Asp Ser Ser Gln Glu Thr Leu Val Asn
1           5               10              15

Leu Ala Gly Leu Leu Val Ser Leu Leu Met Leu Pro Leu Val Ser Gly
              20              25              30

Cys Pro Gly Phe Ser Leu Gly Cys Phe Phe Leu Thr Ala Leu His
         35              40              45

Ile Tyr Ala Asn Tyr Arg Ala Val Arg Ala Leu Val Met Glu Thr Leu
     50              55              60

Asn Glu Gly Arg Leu Arg Leu Val Leu Lys His Tyr Leu Gln Arg Gly
65              70              75              80

Glu Val Leu Asp Pro Thr Ala Ala Asn Arg Met Glu Pro Leu Trp Thr
              85              90              95

Gly Phe Trp Pro Ala Pro Ser Leu Ser Leu Gly Val Pro Leu His Arg
         100             105             110

Leu Val Ser Ser Val Phe Glu Leu Gln Gln Leu Val Glu Gly His Gln
     115             120             125

Glu Ser Tyr Leu Leu Cys Trp Asp Gln Ser Gln Asn Gln Val Gln Val
     130             135             140

Val Leu Asn Gln Lys Ala Gly Pro Lys Thr Ile Leu Arg Ala Ala Thr
145             150             155             160

His Gly Leu Met Leu Gly Ala Leu Gln Gly Asp Gly Pro Leu Pro Ala
              165             170             175

Glu Leu Glu Glu Leu Arg Asn Arg Val Arg Ala Gly Pro Lys Lys Glu
              180             185             190

Ser Trp Val Val Val Lys Glu Thr His Glu Val Leu Asp Met Leu Phe
         195             200             205

Pro Lys Phe Leu Lys Gly Leu Gln Asp Ala Gly Trp Lys Thr Glu Lys
```

```
        210            .         .    215                    220

His Gln Leu Glu Val Asp Glu Trp Arg Ala Thr Trp Leu Leu Ser Pro
·225                        230                    235              240

Glu Lys Lys Val Leu
              245
```

```
<210> 923
<211> 75
<212> PRT
<213> Homo sapiens.

<220>
<221> ·SITE
<222> (62)
<223> Xaa equals any of the naturally occurring· L-amino acids

<220>
<221> SITE
<222> (63)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 923
Leu Pro Val Gln Asn Gly Cys Pro Glu Ser Ala Met Glu Met Asn Gly
  1             5                  10                  15

Arg Ala Pro Cys Trp Glu Val Gly Leu Glu Glu Leu Ser Ser Arg Lys
  ·.          20                  25                  30

Leu Thr Ala Gly Pro Gln Phe Pro Ser Glu Pro Gln Ala Pro Ala Pro
          35                  .40                  45

Ser Leu Phe Arg Gln Cys Leu Leu Trp Phe Cys Gly Met Xaa Xaa Gly
      50                  · 55                  60

Gly Val Gly Ser Pro Pro Pro Leu Thr Gln Glu
  65                  70                  75
```

```
<210> 924
<211> 186
<212> PRT
<213> Homo sapiens

<400> 924
Met Leu Pro Leu Val Ser Gly Cys Pro Gly Phe Ser Leu Gly Cys Phe
  1             5                  10                  15

Phe Phe Leu Thr Ala Leu His Ile Tyr Ala Asn Tyr Arg Ala Val Arg
          20                  25                  30 ·

Ala Leu Val Met Glu Thr Leu Asn Glu Gly Arg Leu Arg Leu Val Leu
          35                  40                  45

Lys His Tyr Leu Gln Arg Gly Glu Val Leu Asp Pro Thr Ala Ala Asn
      50                  55 .                60
```

```
Arg Met Glu Pro Leu Trp Thr Gly Phe Trp Pro Ala Pro Ser Leu Ser
65              70              75              80

Leu Gly Val Pro Leu His Arg Leu Val Ser Ser Val Phe Glu Leu Gln
                85              90              95

Gln Leu Val Glu Gly His Gln Glu Ser Tyr Leu Leu Cys Trp Asp Gln
                100             105             110

Ser Gln Asn Gln Val Gln Val Val Leu Asn Gln Lys Ala Gly Pro Lys
            115             120             125

Thr Ile Leu Arg Ala Ala Thr His Gly Leu Met Leu Gly Ala Leu Gln
    130             135             140

Gly Asp Gly Pro Leu Pro Ala Glu Leu Glu Glu Leu Arg Asn Arg Val
145             150             155             160

Arg Ala Gly Pro Arg Lys Arg Ala Gly Ser Ser Ser Arg Arg His Thr
                165         170             175

Lys Cys Trp Thr Cys Cys Ser Gln Ser Ser
                180             185
```


```
<210> 925
<211> 40
<212> PRT
<213> Homo sapiens

<400> 925
Met Arg Arg Gln Thr Phe Met Ser Ile Leu Val Phe Gln Cys Ser Pro
 1              5               10              15

Ile Ser Phe Gly Leu Cys Ile Asn Lys Glu Arg Thr Val Val Ser Ser
                20              25              30

Val Ile Thr Asp Asn Leu Cys Leu
            35              40
```


```
<210> 926
<211> 40
<212> PRT
<213> Homo sapiens

<400> 926
Met Arg Arg Gln Thr Phe Met Ser Ile Leu Val Phe Gln Cys Ser Pro
 1              5               10              15

Ile Ser Phe Gly Leu Cys Ile Asn Lys Glu Arg Thr Val Val Ser Ser
                20              25              30

Val Ile Thr Asp Asn Leu Cys Leu
            35              40
```

```
<210> 927
<211> 73
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (60)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 927
Ser Leu Leu Leu Ser Cys Cys Pro Leu Gly Asn Arg Ala Tyr Gly Ala
 1               5                  10                  15

Thr Gly Ala Glu Val Ala Ser Arg Ala Ser Leu Glu Gly Ser Glu His
            20                  25                  30

Ser Met Gln Arg Ser His Arg Glu Ala Gly Asn Gln Gly Pro Gly Arg
        35                  40                  45

Ala Ala Ser Cys Ala Ser Pro Ala Phe Val Met Xaa Phe Ser Phe Phe
    50                  55                  60

Thr His Cys Gln Ile Cys Phe Leu Pro
65                  70


<210> 928
<211> 7
<212> PRT
<213> Homo sapiens

<400> 928
Glu Ala Pro Trp Gln Phe Ser
 1               5


<210> 929
<211> 23
<212> PRT
<213> Homo sapiens

<400> 929
Met Phe Leu Lys Ala Gln Trp Leu Tyr Ser Leu Leu Leu Asn Cys Leu
 1               5                  10                  15

Leu Pro Glu Gly Thr Ser Ser
            20


<210> 930
<211> 23
<212> PRT
<213> Homo sapiens

<400> 930
```

510

```
Met Phe Leu Lys Ala Gln Trp Leu Tyr Ser Leu Leu Leu Asn Cys Leu
 1           5               10              15

Leu Pro Glu Gly Thr Ser Ser
            20
```

```
.<210> 931
<211> 64
<212> PRT
<213>. Homo sapiens

<400> 931
Arg Thr Leu Arg Met Ser Pro Ser Ala Phe Cys Tyr Ser Leu Thr Leu
 1           5               10              15

Leu Ala Cys Trp Arg Ala Ala Trp Ile Pro Thr Cys Val Pro Arg Ala
            20              25              30

Ala Gly Glu Met Asp Ser Pro Gly Leu Ala Asp Gly His Trp Cys Ser
            35          .   40              45

Gly Ala Ala Arg Arg Ser Pro His Tyr Val Ala Arg Ser Leu Val Leu
        50          .   55          .       60
```

```
<210> 932
<211> 822
<212> PRT
<213> Homo sapiens

<400> 932
Met Ala Ala Ala Val Val Val Ala Glu Gly Asp Ser Asp Ser Arg Pro
 1           5               10              15

Gly Gln Glu Leu Leu Val Ala Trp Asn Thr Val Ser Thr Gly Leu Val
            20              25              30

Pro Pro Ala Ala Leu Gly Leu Val Ser Ser Arg Thr Ser Gly Ala Val
            35·  .           40              45

Pro Pro Lys Glu Glu Glu Leu Arg Ala Ala Val Glu Val Leu Arg Gly
        50          .   `   55  .               60              .

His Gly Leu His Ser Val Leu Glu Glu Trp Phe Val Glu Val Leu Gln.
65          ·       70              75                      80

Asn Asp Leu Gln Ala Asn Ile Ser Pro Glu Phe Trp Asn Ala Ile Ser
                85          .       90          ·       95

Gln Cys Glu Asn Ser Ala Asp Glu Pro Gln Cys Leu Leu Leu Leu Leu
            100             105     ·       110

Asp Ala Phe Gly Leu Leu Glu Ser Arg Leu Asp Pro Tyr Leu Arg Ser
            115             120             125
```

511

Leu Glu Leu Leu Glu Lys Trp Thr Arg Leu Gly Leu Leu Met Gly Thr
    130   135   140

Gly Ala Gln Gly Leu Arg Glu Glu Val His Thr Met Leu Arg Gly Val
145   150   155   160

Leu Phe Phe Ser Thr Pro Arg Thr Phe Gln Glu Met Ile Gln Arg Leu
                165   170   175

Tyr Gly Cys Phe Leu Arg Val Tyr Met Gln Ser Lys Arg Lys Gly Glu
            180   185   190

Gly Gly Thr Asp Pro Glu Leu Glu Gly Glu Leu Asp Ser Arg Tyr Ala
            195   200   205

Arg Arg Arg Tyr Tyr Arg Leu Leu Gln Ser Pro Leu Cys Ala Gly Cys
    210   215   220

Ser Ser Asp Lys Gln Gln Cys Trp Cys Arg Gln Ala Leu Glu Gln Phe
225   230   235   240

His Gln Leu Ser Gln Val Leu His Arg Leu Ser Leu Leu Glu Arg Val
                245   250   255

Ser Ala Glu Ala Val Thr Thr Thr Leu His Gln Val Thr Arg Glu Arg
            260   265   270

Met Glu Asp Arg Cys Arg Gly Glu Tyr Glu Arg Ser Phe Leu Arg Glu
            275   280   285

Phe His Lys Trp Ile Glu Arg Val Val Gly Trp Leu Gly Lys Val Phe
    290   295   300

Leu Gln Asp Gly Pro Ala Arg Pro Ala Ser Pro Glu Ala Gly Asn Thr
305   310   315   320

Leu Arg Arg Trp Arg Cys His Val Gln Arg Phe Phe Tyr Arg Ile Tyr
            325   330   335

Ala Ser Leu Arg Ile Glu Glu Leu Phe Ser Ile Val Arg Asp Phe Pro
            340   345   350

Asp Ser Arg Pro Ala Ile Glu Asp Leu Lys Tyr Cys Leu Glu Arg Thr
            355   360   365

Asp Gln Arg Gln Gln Leu Leu Val Ser Leu Lys Ala Ala Leu Glu Thr
    370   375   380

Arg Leu Leu His Pro Gly Val Asn Thr Cys Asp Ile Ile Thr Leu Tyr
385   390   395   400

Ile Ser Ala Ile Lys Ala Leu Arg Val Leu Asp Pro Ser Met Val Ile
            405   410   415

Leu Glu Val Ala Cys Glu Pro Ile Arg Arg Tyr Leu Arg Thr Arg Glu
            420   425   430

Asp Thr Val Arg Gln Ile Val Ala Gly Leu Thr Gly Asp Ser Asp Gly
    435   440   445

512

```
Thr Gly Asp Leu Ala Val Glu Leu Ser Lys Thr Asp Pro Ala Ser Leu
    450                 455             460

Glu Thr Gly Gln Asp Ser Glu Asp Asp Ser Gly Glu Pro Glu Asp Trp
465             470             475                 480

Val Pro Asp Pro Val Asp Ala Asp Pro Gly Lys Ser Ser Ser Lys Arg
            485             490                 495

Arg Ser Ser Asp Ile Ile Ser Leu Leu Val Ser Ile Tyr Gly Ser Lys
            500             505             510

Asp Leu Phe Ile Asn Glu Tyr Arg Ser Leu Leu Ala Asp Arg Leu Leu
        515             520             525

His Gln Phe Ser Phe Ser Pro Glu Arg Glu Ile Arg Asn Val Glu Leu
    530             535             540

Leu Lys Leu Arg Phe Gly Glu Ala Pro Met His Phe Cys Glu Val Met
545             550                 555             560

Leu Lys Asp Met Ala Asp Ser Arg Arg Ile Asn Ala Asn Ile Arg Glu
            565             570             575

Glu Asp Glu Lys Arg Pro Ala Glu Glu Gln Pro Pro Phe Gly Val Tyr
        580             585             590

Ala Val Ile Leu Ser Ser Glu Phe Trp Pro Pro Phe Lys Asp Glu Lys
        595             600             605

Leu Glu Val Pro Glu Asp Ile Arg Ala Ala Leu Glu Ala Tyr Cys Lys
    610             615             620

Lys Tyr Glu Gln Leu Lys Ala Met Arg Thr Leu Ser Trp Lys His Thr
625             630             635             640

Leu Gly Leu Val Thr Met Asp Val Glu Leu Ala Asp Arg Thr Leu Ser
            645             650             655

Val Ala Val Thr Pro Val Gln Ala Val Ile Leu Leu Tyr Phe Gln Asp
            660             665             670

Gln Ala Ser Trp Thr Leu Glu Glu Leu Ser Lys Ala Val Lys Met Pro
        675             680             685

Val Ala Leu Leu Arg Arg Arg Met Ser Val Trp Leu Gln Gln Gly Val
    690             695             700

Leu Arg Glu Glu Pro Pro Gly Thr Phe Ser Val Ile Glu Glu Glu Arg
705             710             715             720

Pro Gln Asp Arg Asp Asn Met Val Leu Ile Asp Ser Asp Asp Glu Ser
            725             730             735

Asp Ser Gly Met Ala Ser Gln Ala Asp Gln Lys Glu Glu Glu Leu Leu
            740             745             750

Leu Phe Trp Thr Tyr Ile Gln Ala Met Leu Thr Asn Leu Glu Ser Leu
        755             760             765

                        513
```

```
Ser Leu Asp Arg Ile Tyr Asn Met Leu Arg Met Phe Val Val Thr Gly
    770             775             780
```

```
Pro Ala Leu Ala Glu Ile Asp Leu Gln Glu Leu Gln Gly Tyr Leu Gln
785             790             795             800
```

```
Lys Lys Val Arg Asp Gln Gln Leu Val Tyr Ser Ala Gly Val Tyr Arg
            805             810             815
```

```
Leu Pro Lys Asn Cys Ser
            820
```

```
<210> 933
<211> 157
<212> PRT
<213> Homo sapiens
```

```
<400> 933
Met Ser Pro Trp Leu Leu Leu Leu Leu Val Val Gly Ser Trp Leu Leu
  1             5              10              15
```

```
Ala Arg Ile Leu Ala Trp Thr Tyr Ala Phe Tyr Asn Asn Cys Arg Arg
            20              25              30
```

```
Leu Gln Cys Phe Pro Gln Pro Pro Lys Arg Asn Trp Phe Trp Gly His
            35              40              45
```

```
Leu Gly Leu Ile Thr Pro Thr Glu Glu Gly Leu Lys Asp Ser Thr Gln
    50              55              60
```

```
Met Ser Ala Thr Tyr Ser Gln Gly Phe Thr Val Trp Leu Gly Pro Ile
 65              70              75              80
```

```
Ile Pro Phe Ile Val Leu Cys His Pro Asp Thr Ile Arg Ser Ile Thr
            85              90              95
```

```
Asn Ala Ser Ala Ala Ile Ala Pro Lys Asp Asn Leu Phe Ile Arg Phe
            100             105             110
```

```
Leu Lys Pro Trp Leu Gly Glu Tyr Leu Gln Val Lys Gly Val Gly Asp
        115             120             125
```

```
Asn Leu Ala Gly Arg Val Gly Glu Val Leu Leu Leu Pro Ile Val Leu
        130             135             140
```

```
Gly Cys Pro Thr Arg Arg Arg Asp Thr Ala Glu Trp Arg
145             150             155
```

```
<210> 934
<211> 13
<212> PRT
<213> Homo sapiens
```

```
<400> 934
Leu Val Ile Gly Gly Trp Gly Gln Arg Arg Leu Tyr Arg
```

1   5   10

<210> 935
<211> 126
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (119)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 935
Met Ser Pro Trp Leu Leu Leu Leu Val Val Gly Ser Trp Leu Leu
 1   5   10   15

Ala Arg Ile Leu Ala Trp Thr Tyr Ala Phe Tyr Asn Asn Cys Arg Arg
            20   25   30

Leu Gln Cys Phe Pro Gln Pro Pro Lys Arg Asn Trp Phe Trp Gly His
        35   40   45

Leu Gly Leu Ile Thr Pro Thr Glu Glu Gly Leu Lys Asp Ser Thr Gln
    50   55   60

Met Ser Ala Thr Tyr Ser Gln Gly Phe Thr Val Trp Leu Gly Pro Ile
65   70   75   80

Ile Pro Phe Ile Val Leu Cys His Pro Asp Thr Ile Arg Ser Ile Thr
            85   90   95

Asn Ala Ser Ala Ala Ile Ala Pro Lys Asp Asn Leu Phe Ile Arg Phe
            100   105   110

Leu Lys Pro Trp Leu Gly Xaa Arg Asp Thr Ala Glu Trp Arg
        115   120   125

<210> 936
<211> 90
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (22)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (25)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (26)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 936
Gln Asn Thr Ile Glu Cys Gly Ser Ser Thr Ala Gly Val Cys Cys Ser
1   5   10   15

Gln Leu Trp Arg Leu Xaa Val Gln Xaa Xaa Gly Thr Gly Arg Leu His
            20   25   30

Val Trp Trp Gly Pro Ala Ser Trp Ser Ile Ala Ser Thr Phe Ser Leu
        35   40   45

His Pro Tyr Val Val Glu Glu Ala Gly Glu Leu Ser Gly Val Ser Phe
    50   55   60

Val Thr Pro Phe Leu Arg Leu Val His Ser His Asp Leu Ile Thr Ser
65   70   75   80

Gln Arg Pro Cys Leu Leu Thr Pro Leu Pro
                85   90

<210> 937
<211> 58
<212> PRT
<213> Homo sapiens

<400> 937
Met Lys Leu Thr Phe Ser Phe Pro Trp Phe Thr Leu Thr Ala Leu Gln
1   5   10   15

Leu Trp Ser Ala Thr Glu Cys Gln Ala Val Val Asp Thr Met Ile Ala
            20   25   30

Val Trp Ser Glu Gly Lys Gly Thr Gly Val Ser Trp Glu Pro Trp Leu
        35   40   45

Leu Gly Lys Leu Gln Ser Ser Ser Phe Leu
    50   55

<210> 938
<211> 34
<212> PRT
<213> Homo sapiens

<400> 938
Leu Cys Val Ser His Pro Gly Ile Thr Cys Thr Pro Leu Trp Leu Cys
1   5   10   15

Val Ile Ser Gln Asn Met Glu Leu Ile Leu Met Phe Arg Arg Pro Lys
            20   25   30

Leu Thr

<210> 939

```
<211> 6
<212> PRT
<213> Homo sapiens

<400> 939
Thr Leu Thr Ala Lys Thr
  1               5




<210> 940
<211> 58
<212> PRT
<213> Homo sapiens

<400> 940
Met Lys Leu Thr Phe Ser Phe Pro Trp Phe Thr Leu Thr Ala Leu Gln
  1             5                  10                  15

Leu Trp Ser Ala Thr Glu Cys Gln Ala Val Val Asp Thr Met Ile Ala
              20                  25                  30

Val Trp Ser Glu Gly Lys Gly Thr Gly Val Ser Trp Glu Pro Trp Leu
          35                  40                  45

Leu Gly Lys Leu Gln Ser Ser Ser Phe Leu
      50                  55




<210> 941
<211> 44
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 941
Leu Lys Xaa Ile Thr Ile Cys Cys Leu Gln Lys Thr His Leu His Ser
  1             5                  10                  15

Lys Gly Thr Glu Arg Met Lys Val Lys Gly Trp Glu Arg Val Tyr Trp
              20                  25                  30

Gly Asn Ile Thr Glu Gly Asn Met Met Asn Leu Tyr
          35                  40




<210> 942
<211> 9
<212> PRT
<213> Homo sapiens

<400> 942
Leu Gly Ala Phe Ser Trp Ser Pro Lys
  1             5
```

<210> 943
<211> 96
<212> PRT
<213> Homo sapiens

<400> 943
Met Ala Arg Ser Leu Leu Ile Ile Leu Gly Ala Asp Phe Thr Phe Pro
 1   5   10   15

Thr Ser Phe Asn Cys Phe Gln Lys Met Asn Leu Ala Lys Lys Ser Arg
            20   25   30

Gly Ser Phe Thr His Leu Leu Thr His Ser Trp Cys Leu Ser Leu Phe
        35   40   45

Leu Lys Glu Ala Asp Gln Gly Leu Arg Glu Asn Asn Phe Asp Phe Ser
    50   55   60

His Val Cys Pro Ser Lys Pro Pro Leu Trp Thr Asp Ser Pro Ser Val
65   70   75   80

Pro Gly Arg Asn Trp Asp Asn Pro Arg Thr Phe Leu Val Pro Ser Arg
                85   90   95

<210> 944
<211> 96
<212> PRT
<213> Homo sapiens

<400> 944
Met Ala Arg Ser Leu Leu Ile Ile Leu Gly Ala Asp Phe Thr Phe Pro
 1   5   10   15

Thr Ser Phe Asn Cys Phe Gln Lys Met Asn Leu Ala Lys Lys Ser Arg
            20   25   30

Gly Ser Phe Thr His Leu Leu Thr His Ser Trp Cys Leu Ser Leu Phe
        35   40   45

Leu Lys Glu Ala Asp Gln Gly Leu Arg Glu Asn Asn Phe Asp Phe Ser
    50   55   60

His Val Cys Pro Ser Lys Pro Pro Leu Trp Thr Asp Ser Pro Ser Val
65   70   75   80

Pro Gly Arg Asn Trp Asp Asn Pro Arg Thr Phe Leu Val Pro Ser Arg
                85   90   95

```
<210> 945
<211> 26
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (5)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 945
Met Leu Xaa Phe Xaa Phe Phe Leu Leu Phe Phe Phe Phe Phe Trp Trp
 1           5                   10                  15

Cys Cys Leu Ala Phe Phe Ser Phe Pro Phe
            20                  25




<210> 946
<211> 77
<212> PRT
<213> Homo sapiens

<400> 946
Met Leu Leu Phe Phe Phe Phe Leu Leu Phe Phe Phe Phe Phe Phe Trp
 1               5                   10                  15

Leu Val Leu Phe Gly Ile Phe Phe Phe Ser Phe Leu Lys Lys Met Phe
            20                  25                  30

Ser Gly Asn Met Asn Lys His Thr Ala Asn Tyr Ser Gly Ala Gly Lys
            35              40                  45

Ala Gln Glu Leu Ala Thr Ser Gln Leu His Ser Trp Asp Gly Lys Pro
    50              55                  60

Cys Cys Glu Leu Leu Arg Leu Phe Thr Tyr Phe Thr Tyr
65              70                  75




<210> 947
<211> 77
<212> PRT
<213> Homo sapiens

<400> 947
Met Leu Leu Phe Phe Phe Phe Leu Leu Phe Phe Phe Phe Phe Phe Trp
 1               5                   10                  15

Leu Val Leu Phe Gly Ile Phe Phe Phe Ser Phe Leu Lys Lys Met Phe
            20                  25                  30
```

519

```
Ser Gly Asn Met Asn Lys His Thr Ala Asn Tyr Ser Gly Ala Gly Lys
        35              40              45
```

```
Ala Gln Glu Leu Ala Thr Ser Gln Leu His Ser Trp Asp Gly Lys Pro
    50              55              60
```

```
Cys Cys Glu Leu Leu Arg Leu Phe Thr Tyr Phe Thr Tyr
65              70              75
```


<210> 948
<211> 11
<212> PRT
<213> Homo sapiens

<400> 948
```
Met Trp Arg Trp Leu Ser Ser Phe Trp Leu Leu
 1           5               10
```


<210> 949
<211> 11
<212> PRT
<213> Homo sapiens

<400> 949
```
Met Trp Arg Trp Leu Ser Ser Phe Trp Leu Leu
 1           5               10
```


<210> 950
<211> 378
<212> PRT
<213> Homo sapiens

<400> 950
```
Ala Arg Glu Lys Pro Tyr Leu Val Glu Glu Ala Val Ser Tyr Asn Glu
 1           5               10              15
```

```
Leu Asp Tyr Val Ser Val Gly Leu Asp Gln Gln Thr Val Lys Leu Val
            20              25              30
```

```
Cys Thr Asn Arg Arg Lys Gln Phe Leu Leu Asp Thr Ala Asp Val Ala
        35              40              45
```

```
Leu Ala Glu Phe Phe Leu Ala Ser Leu Lys Ser Ala Met Ile Lys Gly
    50              55              60
```

```
Cys Arg Glu Pro Pro Tyr Pro Ser Ile Leu Thr Asp Ala Thr Met Glu
65              70              75              80
```

```
Lys Leu Ala Leu Ala Lys Phe Val Ala Gln Glu Ser Lys Cys Glu Ala
                85              90              95
```

```
Ser Ala Val Thr Val Arg Phe Tyr Gly Leu Val His Trp Glu Asp Pro
            100             105             110
```

```
Thr Asp Glu Ser Leu Gly Pro Thr Pro Cys His Cys Ser Pro Pro Glu
        115             120             125

Gly Thr Ile Thr Lys Glu Gly Met Leu His Tyr Lys Ala Gly Thr Ser
        130             135             140

Tyr Leu Gly Lys Glu His Trp Lys Thr Cys Phe Val Val Leu Ser Asn
145             150             155             160

Gly Ile Leu Tyr Gln Tyr Pro Asp Arg Thr Asp Val Ile Pro Leu Leu
                165             170             175

Ser Val Asn Met Gly Gly Glu Gln Cys Gly Gly Cys Arg Arg Ala Asn
            180             185             190

Thr Thr Asp Arg Pro His Ala Phe Gln Val Ile Leu Ser Asp Arg Pro
        195             200             205

Cys Leu Glu Leu Ser Ala Glu Ser Glu Ala Glu Met Ala Glu Trp Met
    210             215             220

Gln His Leu Cys Gln Ala Val Ser Lys Gly Val Ile Pro Gln Gly Val
225             230             235             240

Ala Pro Ser Pro Cys Ile Pro Cys Cys Leu Val Leu Thr Asp Asp Arg
            245             250             255

Leu Phe Thr Cys His Glu Asp Cys Gln Thr Ser Phe Phe Arg Ser Leu
        260             265             270

Gly Thr Ala Lys Leu Gly Asp Ile Ser Ala Val Ser Thr Glu Pro Gly
        275             280             285

Lys Glu Tyr Cys Val Leu Glu Phe Ser Gln Asp Ser Gln Gln Leu Leu
    290             295             300

Pro Pro Trp Val Ile Tyr Leu Ser Cys Thr Ser Glu Leu Asp Arg Leu
305             310             315             320

Leu Ser Ala Leu Asn Ser Gly Trp Lys Thr Ile Tyr Gln Val Asp Leu
            325             330             335

Pro His Thr Ala Ile Gln Glu Ala Ser Asn Lys Lys Lys Phe Glu Asp
        340             345             350

Ala Leu Ser Leu Ile His Ser Ala Trp Gln Arg Ser Asp Ser Leu Cys
    355             360             365

Arg Gly Arg Ala Ser Arg Asp Pro Trp Cys
370             375
```

```
<210> 951
<211> 134
<212> PRT
<213> Homo sapiens

<400> 951
Ser Pro Ala Arg His Pro Thr Thr Ser Ser Arg His Thr Trp Trp Glu
```

```
        1                5                    10                   15

    Ser Gly Asn Ala Val Pro Pro Gly Ser Pro Phe His Gly Arg Pro Leu
                 20              25                  30

    Leu Leu Leu Gln Pro Ala Gly Pro Val Pro Phe Gln Asp Gln Pro Phe
             35              40                  45

    Asp Pro Ser Gln Gly Pro Trp Pro Gly Leu His Cys Arg Pro Gln Gly
        50              55                  60

    Leu Met His Ser Met Cys Leu Pro Asp Leu Thr Pro Glu Asp Gly Gly
    65              70                  75                  80

    Lys Ala Gln Asp His Thr Ala Leu Gly His Ser Arg Glu Gln Asp Thr
                 85                  90                  95

    Pro Gly Val Gln Glu Asn Phe Gln Gly Ala Ala Pro Leu Asp Arg Tyr
                 100             105             110

    Thr Arg Arg Phe Asn Thr Leu Tyr Tyr Leu Gly Asn Gln Arg Arg Gly
             115             120             125

    Ile Ile Lys Thr Arg Lys
        130
```

<210> 952
<211> 58
<212> PRT
<213> Homo sapiens

<400> 952
```
    Met Ala Thr Ala Ser Ile Asn Asn Leu Ile Ser Ser Leu Leu Leu His
    1                5                    10                  15

    Leu Ser Leu Leu Ser Ser Lys Ala Gly Lys Phe Leu Ile Trp Lys Glu
                 20              25                  30

    His Lys Thr Ala Cys Gly Cys Tyr Ala Asn Ser Thr Cys Leu Leu Pro
             35              40                  45

    Asn Gly Leu Ser Asn His Lys Gly Lys Ser
        50              55
```

<210> 953
<211> 58
<212> PRT
<213> Homo sapiens

<400> 953
```
    Met Ala Thr Ala Ser Ile Asn Asn Leu Ile Ser Ser Leu Leu Leu His
    1                5                    10                  15

    Leu Ser Leu Leu Ser Ser Lys Ala Gly Lys Phe Leu Ile Trp Lys Glu
                 20              25                  30
```

```
His Lys Thr Ala Cys Gly Cys Tyr Ala Asn Ser Thr Cys Leu Leu Pro
        35                  40                  45

Asn Gly Leu Ser Asn His Lys Gly Lys Ser
        50                  55
```

<210> 954
<211> 63
<212> PRT
<213> Homo sapiens

<400> 954
```
Glu Asn Lys Arg Leu His Phe Gly Glu Ala Ser Thr Leu Ser Gly Leu
 1               5                  10                  15

Leu Phe Cys Phe Met Ser Trp Cys Leu Gly Glu Asp Leu Ala Gly Phe
            20                  25                  30

Ile Gln Ser Gly Arg Val Trp Ala Ile Leu Glu Asn Val Pro Ser Ile
        35                  40                  45

Ser Glu Asn Lys Ser Ala Pro Ser Thr Cys Leu His Pro Gly Asp
        50                  55                  60
```

<210> 955
<211> 77
<212> PRT
<213> Homo sapiens

<400> 955
```
Met Ala Gly Leu Gly Leu Leu Ser Leu Val Gln Phe Ser Val Thr Gly
 1               5                  10                  15

Gly His Trp Thr Gly Ile Ala Asp Ser Leu Val Ala Thr Leu Gly Cys
            20                  25                  30

Arg Leu Ser Gly Ser Val Pro Pro Leu Leu Pro Ala Pro Ser Gly
        35                  40                  45

His Ser Arg Ala Leu His Gln Thr Leu Thr Trp Cys Leu His Leu Leu
        50                  55                  60

Ser Leu Ser Pro Ser Ser Asn Pro Trp Lys Ser Leu Val
65                  70                  75
```

<210> 956
<211> 77
<212> PRT
<213> Homo sapiens

<400> 956
```
Met Ala Gly Leu Gly Leu Leu Ser Leu Val Gln Phe Ser Val Thr Gly
 1               5                  10                  15
```

Gly His Trp Thr Gly Ile Ala Asp Ser Leu Val Ala Thr Leu Gly Cys
            20   25   30

Arg Leu Ser Gly Ser Val Pro Pro Pro Leu Leu Pro Ala Pro Ser Gly
        35   40   45

His Ser Arg Ala Leu His Gln Thr Leu Thr Trp Cys Leu His Leu Leu
    50   55   60

Ser Leu Ser Pro Ser Ser Asn Pro Trp Lys Ser Leu Val
65   70   75

<210> 957
<211> 27
<212> PRT
<213> Homo sapiens

<400> 957
Met Arg Ala Arg Thr Leu Pro Pro Ser Leu Leu Cys Leu Trp Cys Leu
1   5   10   15

Ala Pro Tyr Leu Asn Ile Cys Trp Met Asn Gly
            20   25

<210> 958
<211> 28
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (14)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 958
Ala Gln Trp Leu Thr Pro Val Ile Pro Ala Leu Trp Trp Xaa Glu Glu
1   5   10   15

Gly Gly Ser Pro Glu Val Arg Ser Ser Arg Pro Ala
            20   25

<210> 959
<211> 27
<212> PRT
<213> Homo sapiens

<400> 959
Met Arg Ala Arg Thr Leu Pro Pro Ser Leu Leu Cys Leu Trp Cys Leu
1   5   10   15

Ala Pro Tyr Leu Asn Ile Cys Trp Met Asn Gly
            20   25

<210> 960
<211> 13
<212> PRT
<213> Homo sapiens

<400> 960
Pro Pro Arg Ala Ser Trp Ser Pro Arg Glu His Val Leu
1   5   10

<210> 961
<211> 70
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (2)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 961
Met Xaa Xaa His Glu Ser Ile Leu Leu Val Ser Leu Asp Leu Leu Pro
1   5   10   15

Thr Ser Ile Leu Leu Val Ser Leu Trp Ile Cys Ser Pro Pro Pro Ser
            20   25   30

Ser Trp Val Asn Pro Gly Ser Phe Val Gly Tyr Leu Glu Arg Lys Arg
        35   40   45

Gln Lys Leu Ile Cys Gln Met Thr Arg Thr Asn Arg Leu Phe Gly Met
    50   55   60

Lys Arg Lys Thr Ser Gly
65   70

<210> 962
<211> 53
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (47)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 962
Ser Leu Ala Leu Asn Ser Pro Pro Pro Gly Leu Arg Val Pro Arg Glu
1   5   10   15

Glu Arg Leu Leu Ala Thr Ser Leu Leu Gln Gly Ala Leu Pro Ala Gly

525

           20   25   30

Pro Cys Pro Ser Thr Thr Leu Leu Ser Trp His Arg Pro Ala Xaa Pro
        35   40   45

Pro Gly Ala Gln Gly
      50

<210> 963
<211> 65
<212> PRT
<213> Homo sapiens

<400> 963
Ser Ile Leu Leu Val Ser Leu Asp Leu Leu Pro Thr Ser Ile Leu Leu
  1   5   10   15

Val Ser Leu Trp Ile Cys Ser Pro Pro Ser Ser Trp Val Asn Pro
        20   25   30

Gly Ser Phe Val Gly Tyr Leu Glu Arg Lys Arg Gln Lys Leu Ile Cys
      35   40   45

Gln Met Thr Arg Thr Asn Arg Leu Phe Gly Met Lys Arg Lys Thr Ser
     50   55   60

Gly
 65

<210> 964
<211> 3
<212> PRT
<213> Homo sapiens

<400> 964
Asp Leu Lys
  1

<210> 965
<211> 9
<212> PRT
<213> Homo sapiens

<400> 965
Met Asn Glu Lys Phe Leu Pro Pro Leu
  1   5

<210> 966
<211> 51
<212> PRT
<213> Homo sapiens

```
<400> 966
Met Leu Arg Pro Pro Arg Trp Ala Leu Met Ala Ala Ser Ser His Pro
 1               5                  10                  15

Pro Pro Leu Trp Ser Trp Val Leu Gly Leu Ala Ala His Pro Thr Gly
            20                  25                  30

Met Ser Pro Gly Thr Gly Pro His His Gly Trp Val Ser Ala Ser Ser
        35                  40                  45

Ser Ser Ser
    50
```

```
<210> 967
<211> 244
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (25)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (40)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (41)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (43)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (231)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (237)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 967
Met Arg Ala Pro Phe Asn Thr Leu Phe Gly Arg Leu Phe Gly Leu Leu
 1               5                  10                  15

Leu Val Ala Ile Val Leu Ala His Xaa Leu Ala Phe Phe Trp Phe His
            20                  25                  30

His Tyr Gly Pro Pro Pro Pro Xaa Xaa Ala Xaa Phe Val Glu Gln Pro
        35                  40                  45
```

```
Asp Gly Ser Leu Thr Pro Leu Arg Lys Ala Pro Arg Pro Trp Phe Gly
    50                  55              60

Gly Pro Val Val Pro Leu Thr Phe Gln Phe Ile Ser Leu Ile Ile Ala
65                  70                  75                  80

Ala Trp Tyr Gly Ala Lys Leu Leu Ser Arg Pro Ile Gln Arg Leu Ser
                85                  90                  95

Ala Ala Ala Glu Arg Leu Ser Val Asp Leu Asp Ser Pro Pro Leu Val
            100                 105             110

Glu Thr Gly Pro Arg Glu Ala Arg Gln Ala Ala Ser Thr Phe Asn Leu
        115                 120             125

Met Gln Lys Arg Ile Arg Glu Gln Val Ser Gln Arg Ala Arg Met Leu
    130                 135             140

Gly Ala Val Ser His Asp Leu Arg Thr Pro Leu Ser Arg Leu Lys Leu
145                 150             155                 160

Arg Leu Glu Gln Ile Glu Asp Pro Lys Leu Gln Gly Gln Met Arg Gln
                165             170                 175

Asp Leu Asp Asp Met Ile Gly Met Leu Asp Ala Thr Leu Ser Tyr Leu
            180             185             190

His Glu Gln Arg Thr Ser Glu Thr Arg His Trp Leu Asp Val Gln Ala
        195             200             205

Leu Val Glu Ser Leu Ser Glu Asn Ala Gln Asp Gln Gly Arg Asp Val
    210             215             220

Gln Phe Phe Phe Gly Gly Xaa Pro Pro Gly Gly Gly Xaa Pro Lys Thr
225             230             235             240

Pro Pro Pro Phe
```

<210> 968
<211> 244
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (231)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (237)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 968
```
Met Arg Ala Pro Phe Asn Thr Leu Phe Gly Arg Leu Phe Gly Leu Leu
    1               5               10              15
```

```
Leu Val Ala Ile Val Leu Ala His Val Leu Ala Phe Phe Trp Phe His
              20              25              30

His Tyr Gly Pro Pro Pro Pro Pro Arg Ala Ala Phe Val Glu Gln Pro
          35          40              45

Asp Gly Ser Leu Thr Pro Leu Arg Lys Ala Pro Arg Pro Trp Phe Gly
      50              55              60

Gly Pro Val Val Pro Leu Thr Phe Gln Phe Ile Ser Leu Ile Ile Ala
65              70              75              80

Ala Trp Tyr Gly Ala Lys Leu Leu Ser Arg Pro Ile Gln Arg Leu Ser
              85              90                  95

Ala Ala Ala Glu Arg Leu Ser Val Asp Leu Asp Ser Pro Pro Leu Val
          100             105             110

Glu Thr Gly Pro Arg Glu Ala Arg Gln Ala Ala Ser Thr Phe Asn Leu
          115             120             125

Met Gln Lys Arg Ile Arg Glu Gln Val Ser Gln Arg Ala Arg Met Leu
    130             135             140

Gly Ala Val Ser His Asp Leu Arg Thr Pro Leu Ser Arg Leu Lys Leu
145             150             155             160

Arg Leu Glu Gln Ile Glu Asp Pro Lys Leu Gln Gly Gln Met Arg Gln
              165             170             175

Asp Leu Asp Asp Met Ile Gly Met Leu Asp Ala Thr Leu Ser Tyr Leu
              180             185             190

His Glu Gln Arg Thr Ser Glu Thr Arg His Trp Leu Asp Val Gln Ala
          195             200             205

Leu Val Glu Ser Leu Ser Glu Asn Ala Gln Asp Gln Gly Arg Asp Val
      210             215             220

Gln Phe Phe Phe Gly Gly Xaa Pro Pro Gly Gly Gly Xaa Pro Lys Thr
225             230             235             240

Pro Pro Pro Phe
```

```
<210> 969
<211> 85
<212> PRT
<213> Homo sapiens

<400> 969
Gly Ile Gly Ser Arg Val Arg Ala Ala Phe Ile Ala Leu Glu Pro Ser
1               5               10              15

Leu Gly Met Gly Phe Ser Lys Asn Trp Gln Ala His Arg Leu Pro Ser
              20              25              30

Lys Trp Val Arg Thr Ala Tyr Pro Ser Ile Glu Thr His Tyr Leu Phe
```

```
          35                      40                      45
```

Tyr Leu Phe Leu Ser Gly Ser Gly Ala Arg Cys Ser Tyr Phe Ser His
    50   55   60

Leu Arg Trp Asp Ile Leu Gly Gln Thr Arg Glu Ile Leu Glu Ala Ile
65   70   75   80

Ser Val Val Asn Pro
                85

<210> 970
<211> 54
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (34)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (35)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (46)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 970
Met Lys Thr Val Ser Leu Leu Thr Leu Trp Phe Ser Gln Thr Phe
    1   5   10   15

Ser Phe Asn Leu Phe Phe Ala Pro Pro His Ser Leu Leu Gln Ser Ser
                20   25   30

Ile Xaa Xaa Ser Val Ser Ser Ile Thr Thr Val His Pro Xaa Leu Gly
          35   40   45

Leu Leu Phe Cys Ile Leu
        50

<210> 971
<211> 37
<212> PRT
<213> Homo sapiens

<400> 971
Ile Leu Leu Gly Leu Trp Gln Ser Val Leu Gly Ser Ser Ile Trp Gly
    1   5   10   15

Gln Pro Leu Ser Tyr Asn Cys Gln Glu Pro His Asn Cys Leu Phe Asn
                20   25   30

His Ser Asp Phe Lys
     35

<210> 972
<211> 56
<212> PRT
<213> Homo sapiens

<400> 972
Met Lys Thr Val Ser Leu Leu Leu Thr Leu Trp Phe Ser Gln Thr Phe
1   5   10   15

Ser Phe Asn Leu Phe Phe Ala Pro Pro His Ser Leu Leu Gln Ser Ser
          20   25   30

Ile Phe Phe Ser Val Ser Ser Ile Thr Thr Val His Pro Ile Leu Val
          35   40   45

Phe Phe Phe Ala Phe Phe Arg Thr
     50   55

<210> 973
<211> 65
<212> PRT
<213> Homo sapiens

<400> 973
Lys Leu Thr Gln Ala Gly Ser Gly Tyr Val His Arg Glu Ile Phe Pro
1   5   10   15

Arg Val Cys Phe Phe Asp Ile Leu Ser Pro Ser Phe Tyr Leu Leu Ala
          20   25   30

Gly Ile Ser Cys Pro Thr Thr Pro Val Ile Ile Cys Lys Pro Leu Tyr
          35   40   45

Ser Phe Gln Cys Leu Lys Val Ile His Lys Glu Gly Arg Asn Lys Arg
     50   55   60

Val
65

<210> 974
<211> 11
<212> PRT
<213> Homo sapiens

<400> 974
Met Thr Leu Ser Asn Trp Glu Tyr Gly Phe His
1   5   10

<210> 975

531

```
<211> 60
<212> PRT
<213> Homo sapiens

<400> 975
Met Pro Phe Tyr Tyr Ala Gly Leu Ile Leu Met Glu Met Arg Leu Thr
1               5                   10                  15

Ile Ala Lys Thr Pro Val Glu Thr Gln Gln Ser Trp Pro Ala Phe Leu
            20                  25                  30

Trp Tyr Phe Gly Cys Gly Ser Cys Asp Gly Tyr Ser Ile Lys His Cys
        35                  40                  45

Ile Ser Leu His Leu Leu Ser Phe Ser Leu Gln Lys
    50                  55                  60


<210> 976
<211> 24
<212> PRT
<213> Homo sapiens

<400> 976
Ile Cys Leu Trp Gly Arg Pro Asn Leu Thr Thr Gln Gly Thr Leu Lys
1               5                   10                  15

Gly Ile Ser Gly Arg Arg Ser Gln
            20


<210> 977
<211> 128
<212> PRT
<213> Homo sapiens

<400> 977
Pro Glu Thr Phe Leu Leu Val Thr Gly Ser Gln Trp Gly Ile Leu Gly
1               5                   10                  15

Cys Gln Gly Pro Arg Val Thr Cys Val Gln Leu Phe Tyr Gly Ser Arg
            20                  25                  30

Gly Leu Ser Leu Arg Gln Ala Thr Lys Cys Pro Gly Cys His Pro Pro
        35                  40                  45

Trp Ser Pro Ser Val Pro His Ala Trp Ser Pro Ala Ser Pro Arg Ile
    50                  55                  60

Pro Val Ala Phe Ile Ser Gly Gln Leu Pro Ala Arg Pro Gly Leu Gly
65                  70                  75                  80

His Gly Leu Arg His Glu Ala Arg Pro Pro Pro Ala Pro Leu Pro Arg
                85                  90                  95

Gly Ser Ser Ile Pro Leu His Phe Trp Asn Val Cys Ala Ser Met Met
            100                 105                 110
```

Phe Val Tyr Leu Arg His Leu Lys Ile Tyr Phe Arg Tyr Glu Gly Lys
        115   120   125

<210> 978
<211> 23
<212> PRT
<213> Homo sapiens

<400> 978
Ile Cys Leu Trp Gly Arg Pro Asn Leu Thr Thr Gln Gly Thr Leu Lys
  1   5   10   15

Gly Ile Ser Gly Arg Arg Ser
            20

<210> 979
<211> 78
<212> PRT
<213> Homo sapiens

<400> 979
Arg His Leu Gln Val Gly Gly Gly Gln His Gln Cys Gly Gln Ala Cys
  1   5   10   15

Leu Asp Ser Ser Tyr Arg Pro Leu Leu Cys Met Met Trp Glu Pro Gly
            20   25   30

His Ser His Ala Pro Ser Arg Ala Gln Gly Cys Gly Ser Thr Thr Glu
        35   40   45

His Pro Leu Ser His Cys Pro Pro Leu Pro Arg Ala Leu Pro Ser Pro
    50   55   60

Pro Leu Leu His His Ser Ser Phe Lys Val Pro Leu Leu Tyr
 65   70   75

<210> 980
<211> 98
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (72)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 980
Met Pro Leu Gln Arg Arg Val Lys Val Lys Thr Thr Ser Ser Arg Cys
  1   5   10   15

Leu Pro Gly Thr Thr Trp Gly Leu Thr Leu Phe Ser Met Leu Cys Cys

                        20   25   30

        Phe Trp Pro Leu Gly Ile Ala Ala Phe Tyr Phe Ser Gln Gly Thr Ser
                35   40   45

        Lys Ala Ile Ser Lys Gly Asp Phe Arg Leu Ala Ser Thr Thr Ser Arg
                50   55   60

        Arg Ala Leu Phe Leu Ala Thr Xaa Ala Ile Ala Val Gly Ala Gly Leu
        65   70   75   80

        Tyr Val Ala Val Val Val Ala Leu Ala Ala Tyr Met Ser Gln Asn Gly
                        85   90   95

        His Gly

        <210> 981
        <211> 68
        <212> PRT
        <213> Homo sapiens

        <400> 981
        Met Pro Leu Gln Arg Arg Val Lys Val Lys Thr Thr Ser Ser Arg Cys
        1   5   10   15

        Leu Pro Gly Thr Thr Trp Asp Leu Leu Ser Ser Pro Cys Ser Ala Ala
                        20   25   30

        Ser Gly His Trp Ala Leu Leu Pro Ser Thr Ser Pro Arg Gly Pro Ala
                        35   40   45

        Arg Pro Ser Pro Lys Gly Thr Ser Ala Trp Pro Ala Pro Pro Pro Ala
                50   55   60

        Gly Pro Ser Ser
        65

        <210> 982
        <211> 68
        <212> PRT
        <213> Homo sapiens

        <220>
        <221> SITE
        <222> (25)
        <223> Xaa equals any of the naturally occurring L-amino acids

        <220>
        <221> SITE
        <222> (51)
        <223> Xaa equals any of the naturally occurring L-amino acids

        <220>
        <221> SITE
        <222> (56)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 982
Met Leu Leu Pro Leu Phe Thr Leu Leu Ile Leu Leu Leu Arg Val Phe
 1   5   10   15

Pro Lys Glu Ile Ile Gln Asn Arg Xaa Lys Leu Lys Ala Glu Lys Cys
            20   25   30

Trp Asn Met Thr Leu Phe Ile Ala Val Gly Lys Met Gly Gly Trp Gly
            35   40   45

Thr Trp Xaa Met Leu Glu Ile Xaa Ala Leu Cys Glu Gly Pro Val Gly
    50   55   60

Glu Asp Ala Leu
 65

<210> 983
<211> 8
<212> PRT
<213> Homo sapiens

<400> 983
Arg Val Phe Pro Val Thr Thr Leu
 1   5

<210> 984
<211> 32
<212> PRT
<213> Homo sapiens

<400> 984
Met Leu Leu Pro Leu Phe Thr Leu Leu Ile Leu Leu Leu Arg Val Phe
 1   5   10   15

Pro Lys Glu Ile Ile Gln Asn Arg Lys Lys Leu Lys Ala Glu Lys Cys
            20   25   30

<210> 985
<211> 10
<212> PRT
<213> Homo sapiens

<400> 985
Met Gly Leu Phe Leu Phe Leu Val Ser Ser
 1   5   10

<210> 986

535

```
<211> 10
<212> PRT
<213> Homo sapiens

<400> 986
Met Gly Leu Phe Leu Phe Leu Val Ser Ser
 1               5                   10


<210> 987
<211> 56
<212> PRT
<213> Homo sapiens

<400> 987
Met Leu Thr Gly Val Ile Ser Gly Ser Thr Gly Ala Met Ala Leu Ser
 1               5                   10                  15

Leu Ala Ser Leu Ser Ala His Cys Phe Ala Phe Arg Cys Leu Ala Ala
            20                  25                  30

Pro Phe Tyr Phe Phe Ala Gly Leu Gly Lys His Gly Arg Arg Ile Leu
        35               40                  45

Ile Ser Phe Leu Phe Ser Ala Trp
    50                  55


<210> 988
<211> 56
<212> PRT
<213> Homo sapiens

<400> 988
Met Leu Thr Gly Val Ile Ser Gly Ser Thr Gly Ala Met Ala Leu Ser
 1               5                   10                  15

Leu Ala Ser Leu Ser Ala His Cys Phe Ala Phe Arg Cys Leu Ala Ala
            20                  25                  30

Pro Phe Tyr Phe Phe Ala Gly Leu Gly Lys His Gly Arg Arg Ile Leu
        35               40                  45

Ile Ser Phe Leu Phe Ser Ala Trp
    50                  55


<210> 989
<211> 56
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids
```

536

```
<220>
<221> SITE
<222> (46)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 989
Ala Glu Xaa Ala Pro Leu His Phe His Leu Gly Asp Gly Glu Arg Leu
 1           5                   10                  15

His Leu Lys Lys Lys Lys Asn Lys Lys Lys Lys Pro Lys Gln Gly Trp
            20                  25                  30

Ala Arg Trp Leu Thr Pro Val Ile Ser Ala Leu Leu Glu Xaa Gly Ala
        35                  40                  45

Gly Val Ser Pro Glu Val Met Ser
    50                  55
```

```
<210> 990
<211> 29
<212> PRT
<213> Homo sapiens

<400> 990
Met Leu Val Ile Ile Ile Met Thr Ala Leu Val Ser His Val Pro Ser
 1           5                   10                  15

Val His Ser Val Pro His Ala Val Pro Phe Thr Ser Ser
            20                  25
```

```
<210> 991
<211> 29
<212> PRT
<213> Homo sapiens

<400> 991
Met Leu Val Ile Ile Ile Met Thr Ala Leu Val Ser His Val Pro Ser
 1           5                   10                  15

Val His Ser Val Pro His Ala Val Pro Phe Thr Ser Ser
            20                  25
```

```
<210> 992
<211> 60
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (7)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
```

<222> (34)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 992
Val Phe Lys Thr Ile Arg Xaa Arg Glu Ile Ile Leu Tyr His Glu Asn
 1   5   10   15

Ser Thr Gly Lys Thr His Pro His Asp Ser Leu Ile Ser His Trp Val
            20   25   30

Pro Xaa Thr Thr Gln Gly Asn Tyr Gly Ser Tyr Lys Met Arg Phe Gly
        35   40   45

Trp Gly His Arg Ala Arg Pro Tyr Gln Pro Pro Lys
    50   55   60

<210> 993
<211> 53
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (28)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 993
Met Asp Ile Gln Gly Lys Ala Leu Tyr Ile Arg Phe Leu Leu Thr Leu
 1   5   10   15

Cys Gln Met Val Val Ser Val Met Gly Lys Arg Xaa Gln Gly Arg Arg
            20   25   30

Gly Leu Gly Gly Ala Ala Ala Val Gly Arg Glu Ile Cys Arg Arg Trp
        35   40   45

Gly Cys Cys Val Thr
    50

<210> 994
<211> 12
<212> PRT
<213> Homo sapiens

<400> 994
Leu Cys Trp Thr Arg Ser Ser Val Ile Gly Ala His
 1   5   10

<210> 995
<211> 53
<212> PRT
<213> Homo sapiens

<400> 995

```
Met Asp Ile Gln Gly Lys Ala Leu Tyr Ile Arg Phe Leu Leu Thr Leu
 1               5                  10                  15

Cys Gln Met Val Val Ser Val Met Gly Lys Arg Arg Gln Gly Arg Arg
              20                  25                  30

Gly Leu Gly Gly Ala Ala Ala Val Gly Arg Glu Ile Cys Arg Arg Trp
          35                  40                  45

Gly Cys Cys Val Thr
          50
```

```
<210> 996
<211> 53
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (21)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 996
Lys Gln Gly Ser Leu Leu Gly Trp Ser Arg Val Ile Met Val Arg Gly
 1               5                  10                  15

Ala Gln Ser Tyr Xaa Lys Gly Val Leu Cys Arg His Trp Lys Lys Phe
              20                  25                  30

Gly Phe Tyr Ser Lys Trp Asn Trp Lys Pro Leu Glu Cys Phe Gln Asn
          35                  40                  45

Arg Ser Asp Val Ile
      50
```

```
<210> 997
<211> 53
<212> PRT
<213> Homo sapiens

<400> 997
Met Arg Leu Ile Leu Phe Ala Met Ser Pro Lys Leu Leu Phe Leu Phe
 1               5                  10                  15

Leu Phe Leu Tyr Ile Ser Val Lys Ser Phe Asp Leu Val Leu Ser Phe
              20                  25                  30

Arg Ser Val Leu Phe Met Ser Asp Leu Ile His Cys Phe Tyr His Gln
          35                  40                  45

Leu His Phe Lys Leu
          50
```

```
<210> 998
```

<211> 53
<212> PRT
<213> Homo sapiens

<400> 998
```
Met Arg Leu Ile Leu Phe Ala Met Ser Pro Lys Leu Leu Phe Leu Phe
 1               5                  10                  15

Leu Phe Leu Tyr Ile Ser Val Lys Ser Phe Asp Leu Val Leu Ser Phe
            20                  25                  30

Arg Ser Val Leu Phe Met Ser Asp Leu Ile His Cys Phe Tyr His Gln
         35                  40                  45

Leu His Phe Lys Leu
     50
```


<210> 999
<211> 79
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (34)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 999
```
Leu Gly Ile Trp Leu Ile Pro Gly Leu Arg Arg Ala Asn Pro Lys Ile
 1               5                  10                  15

Ser Leu Glu Tyr Leu Met Val Pro Glu Asn Lys Tyr Ser Lys Asn Cys
            20                  25                  30

Glu Xaa Met Leu Lys Gly Leu Arg Ser Gln Pro Glu Gly Ala Ala Asn
         35                  40                  45

Gly Gln Ser Trp Asn Asn Ser Asn Lys Val Asn Lys Tyr Ser Ile Gly
     50                  55                  60

Leu Leu Leu Asn Lys Cys Met Ile His Glu Ser Thr Leu Lys Asp
 65                  70                  75
```


<210> 1000
<211> 43
<212> PRT
<213> Homo sapiens

<400> 1000
```
Met Phe His Arg Phe Phe Ile Leu Ser Ala Leu Ser Arg Ile Arg Ala
 1               5                  10                  15

Leu Thr Thr Phe Leu Asp Asp Leu Gly Met Thr His Gln Thr Leu Leu
            20                  25                  30

Leu Leu Leu Gly Pro Ser Ile Tyr Ser Phe Cys
```

540

```
<210> 1001
<211> 43
<212> PRT
<213> Homo sapiens

<400> 1001
Met Phe His Arg Phe Phe Ile Leu Ser Ala Leu Ser Arg Ile Arg Ala
 1               5               10              15

Leu Thr Thr Phe Leu Asp Asp Leu Gly Met Thr His Gln Thr Leu Leu
            20              25              30

Leu Leu Leu Gly Pro Ser Ile Tyr Ser Phe Cys
        35              40
```

```
<210> 1002
<211> 111
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (45)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (99)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (104)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (108)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (109)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (111)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1002
Val Gln Val Leu Thr Gln Tyr Tyr Gln Ser Asn Ile Leu Asn Ile Leu
 1               5               10              15
```

```
Ser Gln Val Ile Cys Leu Ser Ile Val Tyr Phe Glu Gly Phe Leu Ser
            20                  25                  30

Phe Thr Phe Asn Leu Phe Phe Ile Ser Ile Ser Ser Xaa Val Ala Leu
            35                  40                  45

Ser Tyr Ser Tyr Pro Asp Ile His Leu Ile Ser Glu Gly Leu Asp Ile
    50                  55                  60

Thr Leu Val Lys Met Gln Ser Asp Leu Ile Leu Phe Leu Lys Gln Thr
65                  70                  75                  80

Ala Val Leu Leu Glu Arg Pro Arg Ala His Arg Phe Ser Thr Arg Val
                85                  90                  95

Gly Tyr Xaa Val Ser Val His Xaa Ser Gly Ser Xaa Xaa Val Xaa
            100                 105                 110
```

<210> 1003
<211> 43
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (13)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1003
```
Met Leu Tyr Val Arg Leu Leu Lys Asn Thr Lys Ile Xaa Val Leu Ile
 1               5                  10                  15

Leu Pro Leu Phe Ile Leu Phe Leu Thr Leu Phe Leu Phe Ile Pro Asn
            20                  25                  30

Gly Phe Leu Phe Val Phe Val Ser Leu Tyr Phe
            35                  40
```

<210> 1004
<211> 118
<212> PRT
<213> Homo sapiens

<400> 1004
```
Met Phe Ile Val Phe Ser Val Leu Leu Leu Phe Phe Gln Phe Ala Ile
 1               5                  10                  15

Cys Gln Phe Ala Asp Leu Ala Ile Phe Pro Leu Ser Met Cys Gln Leu
            20                  25                  30

Cys Asn Leu Ser Ala Arg Leu Ala Ala Pro Ser Ala Arg Phe Glu Gly
            35                  40                  45

Leu Gly Ile Asn Arg Thr Arg Lys Ala Glu Gly Ser Leu Pro Thr Thr
    50                  55                  60
```

```
Ala Val Gln Leu Leu Pro Tyr Lys Ser Gln Ala Val Gln Val Gln His
 65               70              75              80

Pro Gln Ala Val Ile Val Asp Lys Leu Ser Val Ile Ser Leu Arg Ser
            85              90              95

Ile Cys Ile Asp Gln Leu Lys Phe Met Glu Met Glu Asn Ile Ile Lys
        100             105             110

Pro Gly Tyr Val Thr Ser
        115
```

```
<210> 1005
<211> 64
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (55)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (59)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (63)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1005
Ser Ile Lys Ser Cys Ser Ser Phe Tyr Leu Gly Ser Arg Val Asn Arg
 1           5               10              15

Ala Gln Leu Thr Asn Tyr Pro Pro Ala Met Arg Thr Tyr Val Tyr Glu
            20              25              30

Cys His Cys Asp Lys Ser Thr Ser Arg Ala Thr Ala Gly Pro Ser Ile
        35              40              45

Phe His Pro Gly Gly Val Xaa Gly Met Trp Xaa Ile Phe Ala Xaa Val
        50              55              60
```

```
<210> 1006
<211> 42
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (21)
```

543

```
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (23)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (42)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1006
His Ser Pro Glu Ser Cys Tyr Ser Phe Asn Leu Gly Ser Arg Met Arg
 1               5                   10                  15

Ile Ser Val Glu Xaa Lys Xaa Ala Lys Ser Asn Ser Ala Ala Asp Asn
                20          25                  30

Pro Glu Thr Leu Arg Lys Gly Tyr Val Xaa
            35                  40



<210> 1007
<211> 76
<212> PRT
<213> Homo sapiens

<400> 1007
Met Leu Val Leu Leu Ser Leu Leu Ala Ser Gly Gly Leu Pro Leu Leu
 1               5                   10                  15

Leu Val Gly Asp Val Leu Ala Ser Lys Ser Ser Thr Val Leu Phe Leu
                20                  25                  30

Pro Gly Asp Ser Ser Pro Gly Cys Ser Met Ile Thr Pro Leu Pro Pro
            35                  40                  45

Ser Arg Met Cys Leu Lys Ala Gly Ser Ser Gly Glu Gln Thr Val Val
    50                  55                  60

Pro Leu Ser Leu Leu Leu Arg Ser Lys Ser Ser Lys
65                  70                  75



<210> 1008
<211> 76
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (71)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1008
Met Leu Val Leu Leu Ser Leu Leu Ala Ser Gly Gly Leu Pro Leu Leu
 1               5                   10                  15
```

Leu Val Gly Asp Val Leu Ala Ser Lys Ser Ser Thr Val Leu Phe Leu
            20   25   30

Pro Gly Asp Ser Ser Pro Gly Cys Ser Met Ile Thr Pro Leu Pro Pro
            35   40   45

Ser Arg Met Cys Leu Lys Ala Gly Ser Ser Gly Glu Gln Thr Val Val
        50   55   60

Pro Leu Ser Leu Leu Leu Xaa Ser Lys Ser Ser Lys
65   70   75

<210> 1009
<211> 9
<212> PRT
<213> Homo sapiens

<400> 1009
Cys His Leu Gln His Ser Cys Arg Glu
 1   5

<210> 1010
<211> 34
<212> PRT
<213> Homo sapiens

<400> 1010
Met Thr Ala Leu Phe Cys Ser Leu Leu His Ser Leu Val Ser Leu Leu
 1   5   10   15

Leu Pro Thr Lys Trp Gly Gln Gly Lys Ala Phe Leu Thr Gly Pro Leu
            20   25   30

Phe Ser

<210> 1011
<211> 10
<212> PRT
<213> Homo sapiens

<400> 1011
Phe Ser Cys Cys Leu Ser Leu Pro Ile Ser
 1   5   10

<210> 1012
<211> 71
<212> PRT
<213> Homo sapiens

<400> 1012

```
Met Trp Cys Leu Val Phe Cys Ser Cys Val Ser Leu Pro Arg Met Met
 ·1               5                  ·10                  · 15

Ala Ser Ser Phe Ile His Asp Ile Ala Lys Asp Met Ile Ser Phe Leu
            20                  25                  30

Phe Met Ser Ala Trp Tyr Tyr Thr Tyr Phe Asn Ser Phe Glu Ile Tyr
      . 35                  40                  45

Arg Phe Gln Phe Thr Phe Ile Glu Tyr Ser Leu Trp Val Lys His His
     50                  55                  60

Ala Ser Leu Pro Gly Val Gln.
65                  70
```

<210> 1013
<211> 71
<212> PRT
<213> Homo sapiens

<400> 1013
```
Met Trp Cys Leu Val Phe Cys Ser Cys Val Ser Leu Pro Arg Met Met
 1               5                  10                  15

Ala Ser Ser Phe Ile His Asp Ile Ala Lys Asp Met Ile Ser Phe Leu
            20                  25                  30

Phe Met Ser Ala Trp Tyr Tyr Thr Tyr Phe Asn Ser Phe Glu Ile Tyr
         35                  40                  45

Arg Phe Gln Phe Thr Phe Ile Glu Tyr Ser Leu Trp Val Lys His His
   · 50                  55                  60

Ala Ser Leu Pro Gly Val Gln
65                  70
```

<210> 1014
<211> 74
<212> PRT
<213> Homo sapiens

<400> 1014
```
Ala Arg Arg Glu Gly Arg Ser Arg Thr Ala Val Gly Ser Thr Pro Ala
 1             · 5                  10                  15

Ala Pro Leu Ser Leu Thr Arg Gly Gly Gln Cys Pro Ser Arg Gly Ser
            20                  25                  30

Pro Leu Ala Leu Phe Gly His Pro Leu Ala Ser Gln Lys His Ser Glu
         35                  40                  45

Thr Lys Thr Phe Pro Phe Pro Pro Pro His Met Val Leu Arg Leu Pro
     50                  55                  60

Ala Ala Met Gln Leu Lys Gln Leu Ile Phe
65                  70
```

<210> 1015
<211> 21
<212> PRT
<213> Homo sapiens

<400> 1015
Met Ser Leu Ser Leu Ile Ser Leu Ser Phe Leu Phe Pro Ala Gly Ala
  1   5   10   15

Gly Arg Arg Ser Cys
           20

<210> 1016
<211> 21
<212> PRT
<213> Homo sapiens

<400> 1016
Met Ser Leu Ser Leu Ile Ser Leu Ser Phe Leu Phe Pro Ala Gly Ala
  1   5   10   15

Gly Arg Arg Ser Cys
           20

<210> 1017
<211> 25
<212> PRT
<213> Homo sapiens

<400> 1017
Met Leu His Trp Gly Val Leu Cys Ser Leu Phe Leu Met Leu Phe Asn
  1   5   10   15

Glu Gly Ala Ser Ala Ser Leu Gln Gln
           20   25

<210> 1018
<211> 55
<212> PRT
<213> Homo sapiens

<400> 1018
Met Leu His Trp Gly Val Leu Cys Ser Leu Phe Leu Met Leu Phe Asn
  1   5   10   15

Glu Gly Ala Ser Ala Ser Leu Ser Asn Lys Arg Ser Met Arg Glu Asp
           20   25   30

Arg Ala Val His Gly Tyr Gly Tyr Trp Thr Arg Ile Phe Gly Lys Val
           35   40   45

547

Lys Ala Asp His Trp Ile Trp
    50   55

<210> 1019
<211> 95
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (13)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1019
Met Arg Ala Cys Leu Cys Ala Gly Val Cys Met Cys Xaa Ala Ser Cys
1   5   10   15

Leu Gly Leu Pro Met Asn Val Val Glu Cys Tyr Thr Trp Arg Val Leu
            20   25   30

Val Phe His Gln Phe Gln Asp Glu Glu Leu His Asp Thr Val Asp Leu
        35   40   45

Glu Thr Ile Pro Leu Glu Arg Gln Pro Arg Asp Val Gln His Pro Val
    50   55   60

Ser Thr Arg Ile Leu Tyr Leu His Val Tyr Phe Val Ala Val Thr Leu
65   70   75   80

Thr Leu Ile Arg Ile Leu Gln Leu Trp Thr Glu Ala Phe Ser Pro
                85   90   95

<210> 1020
<211> 261
<212> PRT
<213> Homo sapiens

<400> 1020
Met Glu Leu Leu Gln Val Thr Ile Leu Phe Leu Leu Pro Ser Ile Cys
1   5   10   15

Ser Ser Asn Ser Thr Gly Val Leu Glu Ala Ala Asn Asn Ser Leu Val
            20   25   30

Val Thr Thr Thr Lys Pro Ser Ile Thr Thr Pro Asn Thr Glu Ser Leu
        35   40   45

Gln Lys Asn Val Val Thr Pro Thr Thr Gly Thr Thr Pro Lys Gly Thr
    50   55   60

Ile Thr Asn Glu Leu Leu Lys Met Ser Leu Met Ser Thr Ala Thr Phe
65   70   75   80

Leu Thr Ser Lys Asp Glu Gly Leu Lys Ala Thr Thr Thr Asp Val Arg
                85   90   95

```
Lys Asn Asp Ser Ile Ile Ser Asn Val Thr Val Thr Ser Val Thr Leu
         100             105             110
Pro Asn Ala Val Ser Thr Leu Gln Ser Ser Lys Pro Lys Thr Glu Thr
         115             120             125
Gln Ser Ser Ile Lys Thr Thr Glu Ile Pro Gly Ser Val Leu Gln Pro
    130             135             140
Asp Ala Ser Pro Ser Lys Thr Gly Thr Leu Thr Ser Ile Pro Val Thr
145             150             155             160
Ile Pro Glu Asn Thr Ser Gln Ser Gln Val Ile Gly Thr Glu Gly Gly
             165             170             175
Lys Asn Ala Ser Thr Ser Ala Thr Ser Arg Ser Tyr Ser Ser Ile Ile
         180             185             190
Leu Pro Val Val Ile Ala Leu Ile Val Ile Thr Leu Ser Val Phe Val
         195             200             205
Leu Val Gly Leu Tyr Arg Met Cys Trp Lys Ala Asp Pro Gly Thr Pro
    210             215             220
Glu Asn Gly Asn Asp Gln Pro Gln Ser Asp Lys Glu Ser Val Lys Leu
225             230             235             240
Leu Thr Val Lys Thr Ile Ser His Glu Ser Gly Glu His Ser Ala Gln
             245             250             255
Gly Lys Thr Lys Asn
             260


<210> 1021
<211> 260
<212> PRT
<213> Homo sapiens

<400> 1021
Met Glu Leu Leu Gln Val Thr Ile Leu Phe Leu Leu Pro Ser Ile Cys
1               5               10              15
Ser Ser Asn Ser Thr Gly Val Leu Glu Ala Ala Asn Asn Ser Leu Val
             20              25              30
Thr Thr Thr Lys Pro Ser Ile Thr Thr Pro Asn Thr Glu Ser Leu Gln
         35              40              45
Lys Asn Val Val Thr Pro Thr Thr Gly Thr Thr Pro Lys Gly Thr Ile
    50              55              60
Thr Asn Glu Leu Leu Lys Met Ser Leu Met Ser Thr Ala Thr Phe Leu
65              70              75              80
Thr Ser Lys Asp Glu Gly Leu Lys Ala Thr Thr Thr Asp Val Arg Lys
             85              90              95
Asn Asp Ser Ile Ile Ser Asn Val Thr Val Thr Ser Val Thr Leu Pro
```

549

```
                  100                      105                      110

  Asn Ala Val Ser Thr Leu Gln Ser Ser Lys Pro Lys Thr Glu Thr Gln
          115                      120                      125

  Ser Ser Ile Lys Thr Thr Glu Ile Pro Gly Ser Val Leu Gln Pro Asp
          130                      135                      140

  Ala Ser Pro Ser Lys Thr Gly Thr Leu Thr Ser Ile Pro Val Thr Ile
  145                      150                      155                      160

  Pro Glu Asn Thr Ser Gln Ser Gln Val Ile Gly Thr Glu Gly Gly Lys
                  165                      170                      175

  Asn Ala Ser Thr Ser Ala Thr Ser Arg Ser Tyr Ser Ser Ile Ile Leu
                  180                      185                      190

  Pro Val Val Ile Ala Leu Ile Val Ile Thr Leu Ser Val Phe Val Leu
          195                      200                      205

  Val Gly Leu Tyr Arg Met Cys Trp Lys Ala Asp Pro Gly Thr Pro Glu
          210                      215                      220

  Asn Gly Asn Asp Gln Pro Gln Ser Asp Lys Glu Ser Val Lys Leu Leu
  225                      230                      235                      240

  Thr Val Lys Thr Ile Ser His Glu Ser Gly Glu His Ser Ala Gln Gly
                      245                      250                      255

  Lys Thr Lys Asn
                  260
```

```
<210> 1022
<211> 53
<212> PRT
<213> Homo sapiens

<400> 1022
Cys Val Leu Glu Pro Thr Ser Ser Gln Ser Ile Ala Pro Asp Leu Gly
  1               5                      10                      15

Arg Glu Ser Thr Phe Ser Ile Gln Arg Asn Lys Asn Met Gln Phe Met
              20                      25                      30

Val Val Leu Trp Thr Leu Thr Asp Cys Glu Gly Lys Val Tyr Pro Lys
          35                      40                      45

Ala Val Ile Cys Arg
          50
```

```
<210> 1023
<211> 41
<212> PRT
<213> Homo sapiens

<400> 1023
```

```
Met Met Leu Pro Val Ile Ser Leu Phe Leu Ile Ser Leu His Leu Pro
 1               5                   10                  15

Ile Phe Cys Phe Gln Arg Leu Leu Leu Phe Lys Gly Phe Leu Phe Ile
             20                   25                  30

Ala Asn Ser Ser Asn Leu His Ile Lys
         35                   40
```

```
<210> 1024
<211> 41
<212> PRT
<213> Homo sapiens

<400> 1024
Met Met Leu Pro Val Ile Ser Leu Phe Leu Ile Ser Leu His Leu Pro
 1               5                   10                  15

Ile Phe Cys Phe Gln Arg Leu Leu Leu Phe Lys Gly Phe Leu Phe Ile
             20                   25                  30

Ala Asn Ser Ser Asn Leu His Ile Lys
         35                   40
```

```
<210> 1025
<211> 162
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (16)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (17)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (18)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1025
Lys Thr Val Met Leu Pro Ile Ala Gln Glu Val Gln Ser Pro Val Xaa
 1               5                   10                  15

Xaa Xaa Cys Asp Lys Leu Ala Ala Asp Cys Ala His Glu Leu Arg Arg
             20                   25                  30

His Gly Val Ser Cys Val Ser Leu Trp Pro Gly Ile Val Gln Thr Glu
         35                   40                  45

Leu Leu Lys Glu His Met Ala Lys Glu Glu Val Leu Gln Asp Pro Val
     50                   55                  60
```

551

Leu Lys Gln Phe Lys Ser Ala Phe Ser Ser Ala Glu Thr Thr Glu Leu
   65   70   75   80

Ser Gly Lys Cys Val Val Ala Leu Ala Thr Asp Pro Asn Ile Leu Ser
              85   90   95

Leu Ser Gly Lys Val Leu Pro Ser Cys Asp Leu Ala Arg Arg Tyr Gly
             100   105   110

Leu Arg Asp Val Asp Gly Arg Pro Val Gln Asp Tyr Leu Ser Leu Ser
           115   120   125

Ser Val Leu Ser His Val Ser Gly Leu Gly Trp Leu Ala Ser Tyr Leu
     130   135   140

Pro Ser Phe Leu Arg Val Pro Lys Trp Ile Ile Ala Leu Tyr Thr Ser
145   150   155   160

Lys Phe

<210> 1026
<211> 45
<212> PRT
<213> Homo sapiens

<400> 1026
Met Ala Arg Trp Leu Leu Pro Cys Leu Pro Pro Leu His Ser Val Thr
   1   5   10   15

Ser Trp Leu Leu Thr Val Pro Thr Ser Cys Gly Ala Met Gly Ser Ala
                20   25   30

Val Cys Leu Cys Gly Arg Gly Leu Cys Arg Gln Asn Cys
            35   40   45

<210> 1027
<211> 37
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (29)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1027
Leu Pro Pro Phe Pro Gln Cys Asp Lys Leu Ala Ala Asp Cys Pro Thr
   1   5   10   15

Ser Cys Gly Ala Met Gly Ser Ala Val Cys Leu Cys Xaa Arg Gly Leu
                20   25   30

Cys Arg Gln Asn Cys
            35

```
<210> 1028
<211> 45
<212> PRT
<213> Homo sapiens

<400> 1028
Met Ala Arg Trp Leu Leu Pro Cys Leu Pro Pro Leu His Ser Val Thr
 1               5                  10                  15

Ser Trp Leu Leu Thr Val Pro Thr Ser Cys Gly Ala Met Gly Ser Ala
            20                  25                  30

Val Cys Leu Cys Gly Arg Gly Leu Cys Arg Gln Asn Cys
         35                  40.                 45


<210> 1029
<211> 29
<212> PRT
<213> Homo sapiens

<400> 1029
Met Asp Gln Phe Leu Gln Tyr Leu Leu Glu Cys Met Leu Leu Cys Thr
  1               5                  10                  15

Thr Ala Gly Ala Ser Gly Ala Thr Tyr Val Pro Thr Arg
            20                  25


<210> 1030
<211> 42
<212> PRT
<213> Homo sapiens

<400> 1030
Met Asp Gln Phe Leu Gln Tyr Leu Leu Glu Cys Met Leu Leu Cys Thr
 1               5                  10                  15

Thr Ala Gly Ala Ser Gly Ala His Leu Cys Thr Asn Glu Met Thr Leu
            20                  25                  30

Leu Glu Ala Ile Leu Tyr Leu Gln Trp Met
         35                  40


<210> 1031
<211> 53
<212> PRT
<213> Homo sapiens

<400> 1031
Cys Leu Ile Leu Gln Glu Glu Asn Arg Lys Glu Leu Ser Asn Leu Ala
 1               5                  10                  15
```

```
Asn Arg Tyr Lys Ile Asp Ser Arg Val Leu Ser Pro Thr Leu Gly Trp
            20              25              30

Gln Pro Val Gly Gln Thr Pro Lys Thr Val Ala Asp Val Phe Phe Cys
        35              40              45

Leu Pro Ser Leu Gly
    50
```


```
<210> 1032
<211> 56
<212> PRT
<213> Homo sapiens

<400> 1032
Met Leu Leu Phe His Val Trp Val Asp Leu Ala Cys Trp Gly Val Leu
 1               5              10              15

Val His Ser Leu Lys Leu Ala Ser Phe His Trp Gly Leu Lys Ser Thr
            20              25              30

Ser Thr Pro Thr Leu Val Met Ser Pro Glu Asp Pro Gly Asp Ser Thr
        35              40              45

Val Asn Ile Val Ser Thr Leu Leu
    50              55
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<211> 4
<212> PRT
<213> Homo sapiens

<400> 1033
Val Trp Met Pro
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<210> 1034
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<213> Homo sapiens

<400> 1034
Met Leu Leu Phe His Val Trp Val Asp Leu Ala Cys Trp Gly Val Leu
 1               5              10              15

Val His Ser Leu Lys Leu Ala Ser Phe His Trp Gly Leu Lys Ser Thr
            20              25              30

Ser Thr Pro Thr Leu Val Met Ser Pro Glu Asp Pro Gly Asp Ser Thr
        35              40              45

Val Asn Ile Val Ser Thr Leu Leu
    50              55
```

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<210> 1035
<211> 491
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (42)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1035
Ala Ala Arg Val Gly Arg His Gly Arg Arg Arg Arg Ser Ala Ala Met
  1               5                  10                  15

Ala Gly Arg Gly Gly Ser Ala Leu Leu Ala Leu Cys Gly Ala Leu Ala
             20                  25                  30

Ala Cys Gly Trp Leu Leu Gly Ala Glu Xaa Xaa Xaa Pro Gly Ala Pro
         35                  40                  45

Ala Ala Gly Met Arg Arg Arg Arg Arg Leu Gln Gln Glu Asp Gly Ile
     50                  55                  60

Ser Phe Glu Tyr His Arg Tyr Pro Glu Leu Arg Glu Ala Leu Val Ser
 65                  70                  75                  80

Val Trp Leu Gln Cys Thr Ala Ile Ser Arg Ile Tyr Thr Val Gly Arg
                 85                  90                  95

Ser Phe Glu Gly Arg Glu Leu Leu Val Ile Glu Leu Ser Asp Asn Pro
                100                 105                 110

Gly Val His Glu Pro Gly Glu Pro Glu Phe Lys Tyr Ile Gly Asn Met
            115                 120                 125

His Gly Asn Glu Ala Val Gly Arg Glu Leu Leu Ile Phe Leu Ala Gln
        130                 135                 140

Tyr Leu Cys Asn Glu Tyr Gln Lys Gly Asn Glu Thr Ile Val Asn Leu
145                 150                 155                 160

Ile His Ser Thr Arg Ile His Ile Met Pro Ser Leu Asn Pro Asp Gly
                165                 170                 175

Phe Glu Lys Ala Ala Ser Gln Pro Gly Glu Leu Lys Asp Trp Phe Val
            180                 185                 190

Gly Arg Ser Asn Ala Gln Gly Ile Asp Leu Asn Arg Asn Phe Pro Asp
```

555

```
          195                    200                    205

Leu Asp Arg Ile Val Tyr Val Asn Glu Lys Glu Gly Gly Pro Asn Asn
    210                    215                220

His Leu Leu Lys Asn Met Lys Lys Ile Val Asp Gln Asn Thr Lys Leu
225                230                    235                240

Ala Pro Glu Thr Lys Ala Val Ile His Trp Ile Met Asp Ile Pro Phe
            245                250                    255

Val Leu Ser Ala Asn Leu His Gly Gly Asp Leu Val Ala Asn Tyr Pro
            260                265                270

Tyr Asp Glu Thr Arg Ser Gly Ser Ala His Glu Tyr Ser Ser Ser Pro
    275                280                285

Asp Asp Ala Ile Phe Gln Ser Leu Ala Arg Ala Tyr Ser Ser Phe Asn
    290                295                300

Pro Ala Met Ser Asp Pro Asn Arg Pro Pro Cys Arg Lys Asn Asp Asp
305                310                315                320

Asp Ser Ser Phe Val Asp Gly Thr Thr Asn Gly Gly Ala Trp Tyr Ser
            325                330                335

Val Pro Gly Gly Met Gln Asp Phe Asn Tyr Leu Ser Ser Asn Cys Phe
            340                345                350

Glu Ile Thr Val Glu Leu Ser Cys Glu Lys Phe Pro Pro Glu Glu Thr
            355                360                365

Leu Lys Thr Tyr Trp Glu Asp Asn Lys Asn Ser Leu Ile Ser Tyr Leu
    370                375                380

Glu Gln Ile His Arg Gly Val Lys Gly Phe Val Arg Asp Leu Gln Gly
385                390                395                400

Asn Pro Ile Ala Asn Ala Thr Ile Ser Val Glu Gly Ile Asp His Asp
            405                410                415

Val Thr Ser Ala Lys Asp Gly Asp Tyr Trp Arg Leu Leu Ile Pro Gly
            420                425                430

Asn Tyr Lys Leu Thr Ala Ser Ala Pro Gly Tyr Leu Ala Ile Thr Lys
        435                440                445

Lys Val Ala Val Pro Tyr Ser Pro Ala Ala Gly Val Asp Phe Glu Leu
    450                455                460

Glu Ser Phe Ser Glu Arg Lys Glu Glu Glu Lys Glu Glu Leu Met Glu
465                470                475                480

Trp Trp Lys Met Met Ser Glu Thr Leu Asn Phe
            485                490
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<210> 1036
<211> 255

556